



## **ENHANCING EMPLOYABILITY SKILLS OF EDUCATED UNEMPLOYED THROUGH VEDIC MATHEMATICS**

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### **ABSTRACT**

In today's world, the workforce has become more challenging with the concept of globalization and the incorporation of technologies. More organizations are competing against themselves with the technologies advancement and as well as the performance. Other than technological advancement, education and workforce competencies will be the competitive advantage for the 21st century. While the number of technical schools, including engineering colleges, had grown three-fold in India, there remained a shortage of trained and skilled personnel to occupy several positions in the job market. The employability of Indian graduates and post graduates remains a big concern. Employability skills like communication, decision making, Problem Solving, Computational Speed, Numerical Ability, Creativity, Logical Thinking, Reasoning, time management through experts should be part of the course curriculum. Team building activities need to be organised, including outbound interventions. Focus on improving English, Cognitive skills, preparing for interview, group discussion etc. will be of immense help to the students. The present study highlights the effectiveness of the applications of Indian intellectual traditions of Vedic Mathematics in enhancing select employability skills of educated unemployed youths.

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### **INTRODUCTION**

“The world is on the cusp of entering a new reality in which human potential itself will become the major agent of economic growth.” – Jeffrey A. Joerres, CEO and President of ManpowerGroup, “Entering the Human Age”, 2011

Unemployment was seen as a phenomenon confined only to the developing countries during the 1960s and 1970s but in the course of time it gained a global dimension unmanageable in proportion even to the industrialised nations. In the developing countries unemployment has become chronic. In India the problem has assumed alarming proportions in spite of the sixty years of planned development. The inability to create adequate employment opportunities to absorb the growing population has not only resulted in an economic crisis in the country but also created multitudinous social problems.

It is true that young people with a bachelor's degree are more likely to find a job than their less-educated peers, but recent graduates today suffer from high unemployment rates, declining wages, lower-quality jobs, and few opportunities for advancement. Unemployment is a situation of not getting the work and wages with eligible conditions.

People are getting education but not getting the jobs is educated unemployment. Unemployment is the most dangerous problem of each and every developing country now a day. The root cause of the educated unemployment is to be analysed in detail. There are large number of employment opportunities in IT and industrial sectors. Despite large numbers of educated young, there is shortage of skilled manpower. There are unemployed youths and the companies are facing shortage of manpower. Most of the newly employed youths are compulsorily undergone employers own training program. This enhances cost of employers enormously. It also wastes time.

#### **Young People as a Talent Resource**

The current economic situation creates a sense of urgency in devising ways to boost the creation of jobs, and to improve young people's access to those jobs. But the solutions we develop can and should be sustainable on their own terms. Education, vocational training and lifelong learning are central pillars of employability. Including literacy, numeracy, communication skills, teamwork, problem-solving skills and learning ability – which, along with awareness of workers' rights and an understanding of entrepreneurship, are not linked to performance in specific occupations but form the building blocks for lifelong learning and adaptability to change.

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### ***Need and Significance of the Study***

Unemployment is considered to be the most threatening problem which India is facing today. It is not only viewed as an economic issue because it also has social, moral and political consequences. When the man power resources of the country are not utilized due to unemployment, it is a permanent loss for the society. The total quantity of goods and services which could have been produced during the period of unemployment is lost forever by the society. When manpower is not utilized properly there is a loss of human capital. The resources invested in the education, training and skill formation of man power gets wasted when the people don't get work. Continued unemployment and economic insecurity leads to discontentment, frustration and resentment against the existing socio-economic system. The situation of lawlessness might prevail in such conditions. The unemployed people become easy targets of radicalism. The Naxalite Movement is a result of large scale unemployment and its economic miseries. Unemployment even leads to moral degeneration. A person with an empty stomach is likely to develop various types of moral vices. Unemployment breeds corruption, dishonestly, gambling etc... Unemployment lowers the quality of life in the economy. Further, the employees are able to exploit the workers by giving them lower wages and make them work for longer hours. Unemployment creates social unrest in the economy. The people are not able to satisfy their basic needs therefore, they may resort to all sorts of undesirable methods of earning money. Crimes and terrorism may result in society. States of Kerela and Assam have reported highest unemployment rates as well as highest crime rates. Most of the Indian states follow the same except a few exceptions. This shows a direct connection between unemployment and crime rate. Even in United States of America a new study provides some of the best evidence to date that low wages and unemployment make less-educated men more likely to turn to crime. Unemployment divides the society into have and have-nots. Accordingly, there is a class conflict that compounds the problem of social unrest.

Hence it is essential to reduce the rate of unemployment in our society for the development of a well prosperous and progressed nation. If Skill attainment is one of the main reasons of unemployment, it is to be wiped out at any cost. Acquisition of our intellectual treasure of Vedic Mathematics can be a suitable solution to this alarming problem. Hence the significance of the study.

### **LITERATURE REVIEW**

Many studies on employability which includes Bakar & Hanafi,(2007), Rasul, Ismail, Rajudin & Rauf, (2010), Carnevale, Gainer & Meltzer(1990), Yorke & Knight (2004), Livingston, (1997) and Shen & Liu(2011) reveals that In today's world, the workforce has become more challenging with the concept of globalization and the incorporation of technologies. Why the educated youths not absorbed by the new job sectors? The employability skills contain 15 skills that are categorized into six groups; basic skills, communication skills, adaptability skills, developmental skills, group effectiveness skills and influencing skills.

As per the Industrial sector demands, 60% candidates are screened due to lack of communication skills, 25% are screened for analytical skills and 5% for their lack of knowledge in their respective domain. Hence 90% of educated

youth force are lacking in the main skills required for job and employment. Only 10% of educated youth of India is employable. The problem lies in the education system. It is interesting to note that the level of unemployment increases with the level of education. If we really want to solve the unemployment problem, the educational system must be made job oriented. Now our country does not need only clerks, it is in need of persons who can serve her by their physical and mental skill. Skills based education- One of the biggest problems that India faces towards eradicating its unemployment problem is the inter-temporal issue of making a living versus learning a skill(Morris, 2007). Rather than the traditional 12+4 years method of schooling there needs to be a different stream where skills are taught to those who need them to earn a living

### ***Vedic Mathematics***

Vedic Mathematics offers a new approach to resolving the current crisis in education (Puri & Weinless, 1988; Puri, 1988). It is not simply a collection of new computational techniques; rather, it provides an entirely different approach to mathematical computation, based on pattern recognition (Puri, 1991). It has since been shown that the system is equally applicable to more up-to-date aspects of mathematics both at an elementary level as well as in more sophisticated fields (Nicholas, Williams, & Pickles, 1984). The reason that this is possible relies on the nature of the sutras. They frequently describe how the mind approaches, or deals with, a problem in the earliest way (Puri & Weinless, 1988). The Vedic system teaches this sort of approach systematically rather than leaving it to chance and hence we find a number of different possible methods for any particular sum. This is of tremendous use because it enhances variety of strategy. It also enables the subject to be kept alive by directing the attention towards underlying pattern and relationship (Stoddard, 1962; Starkey & Gelman, 1982). It is a system with mental multi choice procedures, which keep the mind alert and agile. It is a complete and most natural Vedic System, which develop our brain to wonderful levels (Reyes, 1984). The learning of Vedic Mathematics will surely help in enhancing skills which are essential for appearing a competitive examination.

### ***Objectives of the Study***

The study was conducted among a population of job aspirants of educated youths. The present study was undertaken with the following objectives:

1. To test the effectiveness of the Supreme power of Vedic Mathematics in enhancing select employability skills (Numerical Ability, Problem Solving Ability and Computational Speed, Creativity, Logic and Reasoning) of educated youths.
2. To equip the youth in securing the appropriate career by attaining employability skills through the knowledge of Indian intellectual tradition of Vedic Mathematics

### ***Hypotheses of the Study***

The following hypotheses were formulated by the investigator to lead the study

1. Vedic Mathematics applications are very much effective in enhancing select employability skills (Numerical Ability, Problem Solving Ability and Computational

Speed, Creativity, Logic and Reasoning) of educated youths.

- Acquisition of the knowledge of Vedic Mathematics applications is the true solution in equipping the educated youths for securing appropriate career.

**METHODOLOGY**

**Population and profile of the sample**

The study is mainly based on primary data, and the secondary data is used to supplement and support the primary data.

The population of the study is the job aspirants of educated youths. The sample population includes 170 youths who were the regular students of a Career Coaching Center of Kozikkodu, district of Kerala State. These total samples were selected using random sampling technique.

**Design, participants and procedure**

The design selected for the study was Pre-test Post-test Single group design. A package of select Vedic Sutras, pre-tested Numerical Ability Test, Problem Solving Ability Test, Computational speed test, and a test on Creativity, Logic and Reasoning were used as tools. The training Center authorities were informed about the nature, purpose and importance of the study. After obtaining the consent from the Institution, days were fixed for conducting group tests. The present research study involved extensive field-work during the period of data collection. Before the intervention, a pre-test was conducted among the group members. At the end, Post-Test was administered and the scores were collected.

**Data Analysis**

The collected data was subjected to a number of statistical operations. The data was classified, tabulated and statistically analyzed using SPSS (version.11). The statistical techniques that were applied to analyze the data included:

- Paired ‘t’ test: To see the difference between pre and post
- Multiple regressions: To find the Cognitive abilities contributing towards Employability Skills

**Test of Normality**

The test of normality to determine the probability that the sample came from a normally distributed population is performed using SPSS (version-11).

**Table 1** Descriptive data showing the mean, standard deviation and the coefficients of the Skewness and Kurtosis, for the total sample

S.No.	Variables	Mean	Std.deviation	Skewness	Kurtosis
1	Numerical Ability	7.88	3.04	0.059	0.024 NS
2	Problem Solving Ability	7.28	2.59	0.004	0.139 NS
3	Computational Speed	17.71	3.48	0.002	0.558 NS
4	Creativity	6.75	6.051	0.155	0.184 NS
5	Logical Thinking	7.51	4.235	0.231	0.050 NS
6	Reasoning Ability	6.471	3.27	0.132	0.479 NS

**Table 2** Comparison between Pre-test and Post-test scores on variables selected. Result through t-test

S.NO	Variables	Test	N	Mean	STD	“t” value
1.	Numerical Ability	Pre	170	7.88	3.04	4.478**
		Post	170	17.66	1.64	
2.	Problem Solving Ability	Pre	170	7.28	2.59	4.164**
		Post	170	18.18	1.51	
3.	Computational Speed	Pre	170	17.71	3.48	7.603**
		Post	170	8.10	0.88	
4.	Creativity	Pre	170	6.75	6.051	4.164**
		Post	170	16.36	4.32	
5.	Logical Thinking	Pre	170	7.51	4.235	2.619**
		Post	170	17.03	3.15	
6.	Reasoning Ability	Pre	170	6.471	3.27	5.63**
		Post	170	15.83	3.14	

\*\* Significant at 0.01 level

The significant t-values for all the variables show that the Pre test scores and Post test scores differ extensively, which ensures that the application of Vedic sutras enhanced these skills.

**Contributors to Employability Skill of the Participants**

**Table 3** Predictors of the Employability Skill of the Participants

General details	Predictor variables	Unstandardized Co- efficient		Standardized co-efficient Beta	t-ratio
		B	Std. error		
R=0.734 R2=0.568 Adj R2=0.557 F=52.194	Creativity	2.953	0.032	0.040	3.935**
	Reasoning Ability	0.195	0.047	0.304	4.164**
	Logical Thinking	1.301	0.274	0.344	4.478**
	Computational Speed	1.270	0.064	0.209	5.201**
	Problem Solving Ability	1.659	0.218	0.548	7.603**
	Numerical Ability	2.421	0.085	0.219	4.286**

\*\* Significant at 0.01 level

The correlation between the observed and predicted values of cognitive aspects for the Participants (R=0.734) showed stronger positive relationship.

**DISCUSSION**

The test of normality determined the probability that the sample came from anormally distributed population. The significant t-values for all the variables show that the Pre test scores and Post test scores differ extensively, which ensures that the application of Vedic sutras enhanced these skills. Also, it is implied that using Vedic Mathematics training as a tool, the employability skill of the participants can be strengthened by developing cognitive predictors that are identified in this present investigation which firmly ensures that application of Vedic sutras is much effective in enhancing the employability of the participants. These results can be added with the results of Research on the effects of Vedic Mathematics on improving Computational Speed by Nicholas, Williams & Pickles (1984), Hope (1987), Muchlman (1994), and Haridas (2004) who concluded that “ Vedic Mathematics provides very easy, one line, mental and superfast methods”.

**Findings**

- The Vedic Methods are effective in enhancing select employability skills (Numerical Ability, Problem Solving Ability and Computational Speed, Creativity, Logic and Reasoning) of educated youths.
- Acquisition of the knowledge of Vedic Mathematics applications is the true solution in equipping the educated youths for securing appropriate career.

## CONCLUSION

Institution of higher learning is a platform for individuals to get their tertiary education as it is where the most number of human capitals being produced. Education is an investment in human capital where the knowledge and skills acquired will produce a better return to the individual (Schiller, 2008). In today's world, there is a need for individuals to compete in getting employed. According to Ministry of Higher Education (2009): "With the current challenges posed by globalization, the nation needs a highly sophisticated workforce capable of facing the challenges at home and abroad". It is a matter of greater happiness and satisfaction that above 80% of the sample of the study could attend their competitive examinations quite confidently, and they were shortlisted in many Rank lists of Job selection. The study shows that Vedic Mathematics is a better solution in improving the employability skills of our youth who are the real human capital resource of our nation.

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