Training Interventions On Career Perception Of Engineering Students

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Abstract— Focus of this study was to analysis the attitude of students towards the training programs conducted in colleges and higher educational institutions. It also tries to examine whether these training programs are helping students in placement opportunities or higher studies. A systematic analysis of literature was conducted to develop the theoretical frame work for the student's development. Mentoring practices adopted in various educational institutions also acted as a variable for the purpose of the study. Students Educational Status, Mental Ability and Psychology were taken as a perceiving tool for the purpose of analysis student's attitude towards present educational system. A questionnaire consisting of 40 question were administered to 125 students among undergraduate students in Kerala region. The same questionnaire was used pre and post training program adopted in government aided college. A paired t test was used to compare the mean of pre and post response of the students. The outcome of the study reveals realistic view of the outcome based education through the training programs adopted through government initiatives. Result of paired sample t test showed that government initiatives and physiological was significant in student performance after training interventions.

Index Terms - Academic Entrepreneurship, Government Initiatives, Higher Education, Industry Linkages, Public Policy, Training.

1 INTRODUCTION

As a developing economy India is moving towards the path of linking educational institution and industry partners. CSR and Academic linkages have very close linkages on the way it is implemented on voluntary disclosure practices as per the IFRS regime [1]. The need to bring harmony among the industry partners and academic stakeholders is through the infusion of training programs and industry oriented training programs in different areas of Institutional collaboration [2]. The higher education system in India is moving towards a turnaround structure where by training programs in government aided educational institutions are becoming a need of the hour. The way training is imparted to different clusters of government aided clusters in increasing day by day[3], [4]. There should be a proper mechanism of analyzing the effectives of these training programs and how far these training programs are helping the students in designing their career goals. Are these training programs necessitating the requirement of the new generation students' mental and physiological need.

Proper moldings of the undergraduate students can be a catalyst for economic development and can result in generation of academic entrepreneurs [5]. The conception of employability has widened in the recent years with employers focusing more on the soft skills and technical ability of the students. Now a days colleges keep pre-placement camp or drives as a pre runner for the real occurrence of the placement drive programs [6]. The Corporate social responsibility also has a wide range of activities to be incorporated for the success of educational institutional programs [7]. The big corporate houses must have initiatives to tackle the need of the market by providing training programs which can build in new talents requirement through the training programs. As part of the corporate social responsibility activities of the firm there must be initiatives to increate training programs scheduled by corporate houses in the premised of government supported educational institutions [8].

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Industry Institution linkages among STEM students of US showed a wide range of improvement through the training programs adopted through big corporate houses in the industrial premised[9]. These type of training programs also inculcate the need for more sophisticated technology oriented training programs in the higher educational institution in Developing economy [10].

2 SIGNIFICANCE OF THE STUDY

Although the government of India had initiated many schemes in relation to the uplifting the education sector, the implementation of these plans are still in papers. There must be a proper study to examine the real picture of all the government initiated plans. A periodic review of these type of initiatives or training programs must be conducted to analyze the reality behind these kind of programs. A pre and post analysis of these training programs or initiatives only will give the real identity of the implication of these policy frameworks. This study was conducted to examine the effect of government initiated training programs on the students output in terms of education, mental ability and physiological status in Kerala state. This study will give input to the policy makers in terms effectiveness of the government initiated training programs on the output of the students in government aided colleges. Against this background this study was conducted to analyze students' perception on the different areas of training needs before and after training.

3 LITERATURE REVIEW

A detailed inquest of the literature survey showed that sufficient literatures are available for training programs conducted in educational institutions, but the quality of training programs measured in government aided institution found little concentration in studies. Training programs conducted among MBA graduated of Poland, showed that a positive relationship existed between training program given at the time of admitting and the training program given at the time of relieving from the MBA programs [11]. Another study conducted in India observed that a lot of students attending training program in under graduate level have the tendency to become academic entrepreneurs [12]. Another study conducted among a group of US students in STEM disciplines found positive relationship through the analysis of paired sample t test. This study also focused on the pre and post analysis performance of students on the placement training programs [13]. The above studies are

perfect examples of studies which have overwhelming responses in terms of studies through the amount of Google scholar citations it received. Another set of studies on the impact of training programs on the output of employability was also measured among students of government aided colleges [14][15] [16]. This training was primarily done on the computer literacy programs efficiency. Impact of training program in the curriculum of business schools has created widespread impact on the employability output of the students. A study focusing on B-schools in Berlin shows positive correlation among the training programs conducted in labs and a negative correlation conducted by faculty in class room teaching [17]. The success of any training programs will depend on the proper monitoring mechanism adopted. A study to analyze the pre and post mechanism of student's quality after training programs was adopted by Lead University through work integrated training program. A pre post analysis of students who underwent the work integrated short training programs was conducted through administered questionnaire and personal interview of the training manager [18]. The output of the study revealed that students exhibited entrepreneurial abilities after the completion of training programs in the industry oriented environment. A number of study gives positive remarks on the Internship programs, Work integrated learning programs, On the job training programs on the entrepreneurial characteristics among the college students [19][20]. Students having experience in the working environment was found to be better entrepreneurs in managing their working capital requirement of the organization [21]. Analyse of a questionnaire driven study in rural area of Malaysia found that students from low income family must be prone to more training programs for physiological upliftment [22]. Every developing countries have policies adopted for the purpose of enhancing the quality of educational system, but how far it is monitored remains the question at last [23]. A training programs through proper monitoring will give more realistic view of the training gap identification [24]. Another set of studies lays importance on conduct of training need analysis among students before deciding on the type of training program to be offered. A study conducted in US among medical students lays the importance of training need analysis on success of proper focused training programs [25]. All training programs have cost-benefit analyses which need to be analyzed and should be matched with the outcome of the programs [26].

4 HYPOTHESES

$H0_1$: There is no Significant different between pre and post performance of students through government Initiated training program

$H1_1$: There is Significant different between pre and post performance of students through government Initiated training program

$H1_2$: There is Significant different between pre and post performance of students through mental uplift in training program

$H1_3$: There is Significant different between pre and post performance of students through Physiological support in training program

5 RESEARCH METHODOLOGY

Agenda behind conduct of this study was to examine the pre and post training effectiveness. The students of government aided college were analyzed for the purpose of comparing the performance before and after imparting of the government aided training program. The students undergoing engineering education in Self financing colleges under Institute of Human Resources development (IHRD) in Kerala region was considered for the purpose of study. This study was conducted through a 40 questions enabled questionnaire to 125 students in government aided college. A 5 point Likert scale was used for the purpose of recording response from the students of engineering colleges. The cronbach's Alpha of 0.90 and reliability of 0.80 was found to be sufficient to administer the questionnaire. The same set of questionnaire was distributed to the same set of students after the conduct of government Initiated training program. The paired sample t test was used to compare the means between pre and post performance of students.

6ANALYSIS AND FINDINGS

A paired sample t test was used to compare the effectiveness of training programs through pre and post training means of sample.

Table 1 Paired Sample Descriptive

Students trust in govt. initiatives	Mean	N	SD	Std. Error Mean
Pre	3.4323	125	.8655	.06570
Post	3.9329	125	.8964	.07134

Table 2 Correlation of Samples

Students trust in govt. initiatives	N	Correlation	Std. Error Mean
Pre & Post	125	.659	.0001*

* Significant at 1% level

Table 3 Correlation of Samples

Students trust in govt. initiatives	t	df	Sig. (2-tailed)
Pre & Post	-3.274	124	.002*

* Significant at 1% level

From table 1,2 and 3, it can be inferred that the students trust about the government initiatives in the state is less in the pre training period, which showed improvement in post training analysis. Correlation of the samples also showed significant positive correlation of 0.659, which indicates that pre and post training performance was significantly correlated at 1% level. From the analysis of paired sample t test, it was concluded the difference in sample mean between pre and post training was significant at 1% level. So it can be concluded that training initiatives on students through enrichment of government initiatives was effectives in improving the perception of students.

Table 4 Paired Sample Descriptive

Students attitude towards mental uplift	Mean	N	SD	Std. Error Mean
Pre	3.3654	125	.7655	.06456
Post	3.8564	125	.7994	.07357

Table 5 Correlation of Samples

Students attitude towards mental uplift	N	Correlation	Std. Error Mean
Pre & Post	125	.713	.002*

* Significant at 1% level

Table 6 Correlation of Samples

Students attitude towards mental uplift	t	df	Sig. (2-tailed)
Pre & Post	-1.537	124	.121*

* Significant at 1% level

From table 4,5 and 6, it can be inferred that the students belief about mental uplift in the state through training is less in the pre training period, which showed improvement in post training analysis. This is a favorable sign of training on the post performance behavior of the students. Correlation of the samples also showed significant positive correlation of 0.713, which indicates that pre and post training performance was having high positive correlation at 1% statistical significance level. From the analysis of paired sample t test, it was concluded the difference in sample mean between pre and post training was not significant. So it can be concluded that training initiatives on students through enrichment of mental support was not effectives in improving the students perception on post performance..

Table 7 Paired Sample Descriptive

Students trust in physiological Support	Mean	N	SD	Std. Error Mean
Pre	3.2342	125	.8302	.07731
Post	3.8335	125	.8701	.07212

Table 8 Correlation of Samples

Students trust in physiological Support	N	Correlation	Std. Error Mean
Pre & Post	125	.559	.001*

* Significant at 1% level

Table 9 Correlation of Samples

Students trust in physiological Support	t	df	Sig. (2-tailed)
Pre & Post	-3.542	124	.000*

* Significant at 1% level

From table 7,8 and 9, it can be inferred that the students trust about the physiological support in the state is fewer in the pre training period, which showed enhancement in post training analysis. Correlation of the samples also showed significant positive correlation of 0.559, which indicates that pre and post training performance about the physiological support was significantly correlated at 1% level. From the analysis of paired sample t test, it was concluded the difference in sample mean between pre and post training about the physiological support was significant at 1% level. So it can be concluded that training initiatives on students through enrichment of physiological support to students was effectives in improving the perception of students through training interventions.

7 MANAGERIAL IMPLICATIONS

Policyholder must defiantly keep a close watch on the training needs of different educational institutions. This study was focused on engineering colleges only. The same study may be extrapolated to different educational disciplines. This study must be taken up by the higher education department as an initiative to support “Make in India” theme. Industry Institution linkage must be given due consideration in identifying thrust areas were training programmes can be initiated. Mentoring must be made a mandatory tool in every discipline with hands on delivery by experts only. Educational Institutions must arrange venue for faculty interactions with industry. These types of interactions will facilitate faculty to incorporate suitable working examples in class rooms. Employability status of a graduate is an important thrust area which needs taken care in the present education system. The strength of an economy depends on the strength of educational system in the country. The regulatory bodies must keep a close watch on the periodic training activities of the educational institution. Government must provide financial aid and grants to self financing colleges for conduct of training programs through individual or collaborative mode. Industry Institutional linkage is an integral part of students success in multiplications of new academic entrepreneurs.

8 CONCLUSION

This research study throws significant light on the effectiveness of training program on the post performance behavior of students. Government initiatives and Physiological support was found to be significant in student’s perception about training interventions. This study must be a steeping stone for state and policyholders to incorporate training needs in the curriculum of graduate degree programs. Even though Mental uplift was found to have no statistical significance, but its mean score showed an improved value. Hence the three performance indicators measured through Government Initiatives Physiological support had interventions on the perception of students.

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