

The Impact of Developmental Programmes on the Entrepreneurial Attitude of Potential Entrepreneurs in Raipur City

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ABSTRACT

This study was carried out to explore whether developmental programmes organized by various universities improve the inherent entrepreneurial attitudes amongst the potential entrepreneurs. The scope of the study was limited to Raipur City (C.G). The sample of the study was confined to 28 MBA students of an autonomous private college. Questionnaires were distributed to the students and their pre-training and post-training scores were calculated and measured. The entrepreneurial attitudes were measured on four sub-scales: i.e. Achievement motive, Innovativeness, perceived Personal Control and perceived Self-Esteem. The pre-developmental and post-developmental differences in responses were analyzed by using the Likert scale and further conclusions were drawn by applying the paired t-test. The time period of the study was three months. The major finding of the research was that the developmental sessions did have a positive impact on the overall entrepreneurial attitude amongst the potential entrepreneurs.

Keywords: Entrepreneurial Attitude, Entrepreneurial Intentions, Developmental Programmes, Cognition, Affection, Behaviour

JEL Classification : O44

INTRODUCTION

It is said that “Entrepreneurs are born, not made”, but history has been a witness to the fact that proper formal education and exposure to some self-development programmes complementing a basic entrepreneurial attitude is the backbone for a successful entrepreneur. Every individual is born with certain inherent attitude, and all the aspects of entrepreneurship cannot be taught. However, various educational and developmental institutions need to recognize the positivity of attitude and enhance the skills of an individual by formal methods.

For a developing nation like India, balanced regional development is a must for reducing unemployment, increasing the GDP, per capita income and increase the level of new opportunities arising due to globalization. Not only in metros, but all the upcoming developing states like Raipur (Capital of Chhattisgarh, formed on November 1, 2000) also need to be exposed to the world of innovativeness, achievement and economic growth. Research shows that young adults (usually in the age group of 20-30 years) have a natural aptitude for entrepreneurship and are adept in taking advantage of new opportunities. Many competitors have the same traits, but what differentiates an entrepreneur and a normal man is their attitude, education and reaction to various stresses. Education and training equips an individual for unexpected needs and opportunities. One needs to be flexible, but at the same time, one must never compromise with their core values.

Entrepreneurs are a valuable asset for the government as they create new job opportunities, prevent industrial slums, reduce social tension, provide balanced regional development and above all, promote economic development of a nation. So, the encouragement and promotion of entrepreneurial attitude is recommended for accelerating economic growth.

Entrepreneurial attitude can be defined as an individual's positive or negative intention towards any new venture, any new unforeseen situation and the techniques they use to overcome stressful situation and reach the target. Entrepreneurial attitude can be measured by *Cognition, Affection and Behaviour*. Four personality traits are considered to be very important for a successful entrepreneur, i.e. *Achievement, Innovation, Self-Esteem* and *Personal Control*. These traits define the inherent entrepreneurial skills of an individual which can be polished and directed in the right direction with proper training and education. Cognition means the beliefs and thoughts already existing in the mind of an individual about a particular subject. Affect means the positive and negative feelings that

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motivates or demotivates a person towards the perception of an object due to his past experiences. Behavior or Conation highlights the behavioural components, intentions and predisposition to react to a given condition or situation. All these components usually exist in the sub-conscious mind of an individual and are reflected in their pattern of work. Every trait has been subdivided into three sub-scales i.e.: Achievement- Cognition, Achievement-Behavior, Achievement- Affect ; Innovative- Cognition, Innovative-Behavior, Innovative- Affect; Self-Esteem-Cognition, Self-Esteem-Behavior, Self- Esteem-Affect ; Personal Control-Cognition, Personal Control-Behavior, Personal Control- Affect to measure the pre and post training changes in the attitude of potential entrepreneurs.

RATIONALE AND OBJECTIVES OF THE STUDY

Entrepreneurs in any field need to possess certain basic attitudes marked by Innovativeness, Achievement Orientation, Self-Esteem and Personal Control. This partly guarantees their success in the market and new ventures they undertake. Today, training and development sessions are a part and parcel of every professional programme. Developmental sessions fine tune and direct the inherent qualities in an individual and impact every individual in a different way depending on their perception skills. The basic objectives of this paper are :

- ❖ To study the impact of developmental sessions on the overall entrepreneurial attitude of the prospective managers of Raipur City.
- ❖ To study whether proper exposure can enhance the achievement motive inherent in an individual.
- ❖ To study the impact of developmental programmes on the innovative behavior of the sample under study.
- ❖ To study the impact of self - development sessions in improving the personal control of prospective managers.
- ❖ To analyze the impact of sessions in enhancing the Self Esteem of the future entrepreneurs.

HYPOTHESES

- 1) There is no effect of the developmental sessions on the overall entrepreneurial attitude of the potential managers.**
- 2) There is no effect of the developmental sessions on the need for Achievement motive of potential managers.**
- 3) There is no relationship between the developmental sessions and Innovativeness enhancement of the sample under study.**
- 4) The Personal Control activities of the prospective managers are unaffected by the developmental sessions.**
- 5) The sessions have no positive impact on the Self Esteem of the sample undertaken for the study.**

The Hypotheses were tested by using paired t-test.

LITERATURE REVIEW

Entrepreneurship is “at the heart of national advantage” (Porter 1990, p. 125) and entrepreneurial people are a valuable asset for the government because they create new jobs, take risks and are willing to take responsibilities (Torokoff, 2006). Therefore, entrepreneurial attitude of the prospective managers should be reinforced by formal education and training. There is a consensus that entrepreneurial education and developmental sessions have a major role to play in the economic development of a country (Gibb, 1996). It has been acknowledged that entrepreneurial enhancement programmes help ignite the artistic, creative and perceptual aspects of entrepreneurship (Shephard and Douglas, *ibid*). It has been debated that entrepreneurial characteristics are innate but now, findings support that psychological attributes associated with entrepreneurship can be culturally and experientially acquired (Vesper, 1990; Gorman, 1997). Kourilsky and Walstad (1998) suggested that stimulating entrepreneurial attitudes through education at the University level could encourage entrepreneurship as a career choice. Attitudes tend to change across time and situations through an interactive process with the environment, and once a person's attitude has been measured; a prediction can be made about the person's future actions (Carlson, 1985). Robinson et al. (1991) developed the EAO model based on the four constructs of Achievement, Innovation, Personal Control and Self Esteem. A study by Pradhan and Nath (2012) - "Perception of Entrepreneurial Orientation and Emotional

Intelligence: A Study on India's Future Techno-Manager" examined the relationship between emotional intelligence and entrepreneurial orientation . "The Case of Cavin Kare Private Limited (A): The Entrepreneurial Innovation" (Srinivasan, 2011) helped to describe the context of opportunity recognition and exploration. The importance of self-employment and entrepreneurship on the economic growth of the nation cannot be undermined. The role of universities and the current education system have been highlighted as a catalyst for encouraging students towards entrepreneurship as a career option (Aaijaz, Ibrahim & Ahmad, 2012).

RESEARCH METHODOLOGY

❖ **Sampling :** The study focuses on one of the leading private autonomous University of Raipur (C.G). The sampling technique employed in this study is Non Random Convenience sampling. The respondents of this study were only those who were willing to fill out the questionnaire related to attitude measurement, then undergo a formal scheduled developmental session and again fill the questionnaire. The details of the respondents considered for the study are shown in the Table 1.

Table 1: Details of the Respondents Considered for the Study				
Sample Size	Age	Sex		Pursuing
		Male	Female	
28	21-24 yrs	16	12	MBA 2nd Sem
Source: Primary Data				

❖ **Method of Data Collection :** The instrument used to collect data was the Questionnaire. The items and categories in the questionnaire were adopted from Robinson et al.'s (1991) Entrepreneurial Attitude Orientation (EAO) scale that involved four sub- categories to measure entrepreneurial traits: Achievement, Innovation, Personal Control and Self-Esteem. Attitude, according to Robinson et al. (1991), is a combination of three components, i.e. *Cognition, Behavior and Affect*. The adopted questionnaires consisted of 75 items, but for the present study, the items were brought down to 48 items by taking into consideration the four sub- categories i.e.: Achievement, Innovation, Self-Esteem and Personal Control (as shown in the Table 2). Each sub- category was in turn divided into three components each i.e. Achievement-Cognition, Achievement- Affect, Achievement- Behavior.

Table 2: Pattern of Distribution of the Questionnaire		
CATEGORY	QUESTIONS	NO. OF ITEMS
Achievement-Affect	1 , 2 , 3 , 4	04
Achievement- Behavior	5 , 6 , 7 , 8	04
Achievement-Cognition	9 , 10 , 11 , 12	04
Innovation- Affect	13, 14,15,16	04
Innovation- Behavior	17,18,19,20	04
Innovation-Cognition	21,22,23,24	04
Personal Control-Affect	25,26,27,28	04
Personal Control-Behavior	29,30,31,32	04
Personal Control-Cognition	33,34,35,36	04
Self Esteem-Affect	37,38,39,40	04
Self Esteem-Behavior	41,42,43,44	04
Self Esteem-Cognition	45,46,47,48	04
Source:48 Questions adopted from Robinson et al. (1991) EAO Scale 75 item questionnaire.		

The respondents were MBA students of an autonomous renowned private university. Out of the 35 copies of the questionnaires that were distributed, only 28 filled in questionnaires were returned. The sample size was small as in a developmental session, they were ready to take only 15 students at a time in a batch. Hence, two batches of 14- 14 interested students were sent for undergoing the session.

❖ **Data Analysis Method :** Firstly, the traits were grouped into various categories (as in Table 2) and were presented to the respondents in the form of questionnaires. Some questionnaires with * sign had reverse marking i.e. SA = 1 point and SD = 5 points. The Likert scale was used to tabulate the data, i.e. the responses were distributed into 5 parts :

Strongly Agree (SA) = 5 points
 Agree (A) = 4 points
 Neutral (N) = 3 points
 Disagree (D) = 2 points
 Strongly Disagree = 1 points

The total score of the respondents were summated before they were exposed to the developmental session (as shown in Annexure 1). The session included various motivational lectures and presentations from management gurus. It involved a one-month exposure to personality development workshops and activities related to stress management, self-control and field work. During the next 15 days, the respondents were given some live projects where they applied their skills to help others, offered probable solutions to some forecasted problems and dealt with scarce resources to maximize profit and minimize cost without compromising on quality. Their performance was supervised by eminent training personnel. After a period of 1.5 months, the respondents were again exposed to attitudinal questionnaires, and scores were observed by using the Likert scale (Annexure 1). This was basically done to observe the impact of the self developmental sessions on the mental attitude of the prospective managers.

RESULTS AND ANALYSIS

The overall scores obtained from the respondents were tabulated both in the pre and post developmental session (see Annexure 1). The various hypotheses were tested and their impact was interpreted by using the t-test.

❖ **H1: There is no effect of the sessions on the overall Entrepreneurial attitude of the potential entrepreneurs.**

Table 3: Observation For Overall Entrepreneurial Attitude (Data obtained from Annexure 1)				
Total no. of samples	Sum of scores before session (Xi)	Sum of scores after session (Yi)	Difference in the scores (Di = Xi - Yi)	ΣD^2
			ΣDi	
28	5197	5475	-278	4260
Source: Primary Data				

One sided t-test was applied on the data obtained from the Table 3 for calculating the value of Mean, S.D and 't'. The value of 't' at 5% level of significance at 27 degrees of freedom i.e. t-tabulated = -1.703(as seen from the t-table). From the observations of the Table 3, the value of 't' for the overall entrepreneurial attitude of the potential entrepreneurs before and after the session was calculated, and is depicted in the Table 4. The observed value of t = - 7.05 (as shown in the Table 4). The researcher compared the observed value of 't' with the tabulated value of 't'. It was observed that it falls in the rejection region and hence, the H1 was rejected at 5% significance level, and it can be concluded that the various short term developmental programmes definitely had a positive impact on the overall entrepreneurial attitude of the prospective managers.

❖ **H2: There is no effect of the developmental sessions on the need for Achievement motive of potential managers.**

One sided t-test was applied on the data obtained from the Table 5 for calculating the value of Mean, S.D and 't'. The value of 't' at 5% level of significance at 27 degrees of freedom, i.e. t-tabulated = -1.703 (as seen from the t-table).

Table 4: Calculation of the value of "t"				
Mean of difference (D)	S.D of difference	t-calculated	t-tabulated	Findings
-9.9	7.45	-7.05	-1.703	Null Hypothesis rejected
Source: Calculation shown in Annexure 1				

From the observations of the Table 5, the value of 't' for the achievement motive factor in potential entrepreneurs before and after the developmental session was calculated and is shown in the Table 6. Comparing the observed and tabulated value of 't' from the calculation (as shown in Table 6), it was inferred that the observed value of 't' falls in the rejection region and hence, it can be concluded that self motivational and developmental sessions increased the achievement motive of the respondents.

❖ **H3: There is no relationship between the developmental sessions and Innovativeness enhancement of the sample under study.**

One sided t-test was applied on the data obtained from the Table 7 for calculating the value of Mean, S.D and 't'. The value of 't' at 5% level of significance at 27 degrees of freedom i.e. t-tabulated= -1.703 (as seen from the t-table). From the observations of the Table 7, the value of 't' for the impact of innovativeness factor in potential entrepreneurs before and after the session was calculated and is shown in the Table 8. The observed value of $t = -4.095$ (as shown in the Table 8) falls in the rejection region and hence, the H3 was rejected at 5 % level of significance. Innovativeness is a hidden talent in humans which comes out only in times of crisis i.e. where resources are less and returns are to be maximized. During developmental sessions, this quality was tested and improved. Hence, there was a positive effect of these sessions in uplifting the innovativeness aspect of the prospective managers.

❖ **H4: The Personal Control activities of the prospective managers are unaffected by the developmental sessions.**

One sided t-test was applied on the data obtained from the Table 9 for calculating the value of Mean, S.D and 't'. The value of 't' at 5% level of significance at 27 degrees of freedom, i.e. t-tabulated= -1.703 (as seen from t-table). From the observations of the Table 9, the value of 't' for the impact of the personal control factor in potential entrepreneurs before and after the developmental session was calculated and is depicted in the Table 10.

The observed value of $t = -2.568$ (as shown in Table 10) falls in the (H4) rejection region at 5% level of significance, and hence, it can be concluded that self motivational and developmental sessions increased the personal -control abilities of the respondents. Every individual has a certain level of personal -control that is acquired through their family background, culture and many other external and internal factors. Every factor cannot be controlled, but some sessions that exposed them to contingent situations definitely improved their personal control factors.

❖ **H5: The sessions have no positive impact on the Self Esteem of the sample undertaken for study.**

One sided t-test was applied on the data obtained from the Table 11 for calculating the value of Mean, S.D and 't'. The value of 't' at 5% level of significance at 27 degrees of freedom i.e. t-tabulated = -1.703 (as seen from t-table),

Table 5: Cross Tabulation of Achievement Score Before and After the Session (Data Obtained from Annexure 2)				
Total no. of samples	Sum of scores before training (Xi)	Sum of scores after training (Yi)	Difference in the scores (Di = Xi - Yi)	ΣD^2
			ΣDi	
28	1304	1370	-66	356
Source: Primary data				

Table 6: Calculation of the Value of "t" for the Achievement Motive Factor				
Mean of difference D	S.D of difference	t-calculated	t-tabulated	Findings
-2.357	2.72	-4.586	-1.703	Null Hypothesis Rejected
Source: Calculation shown in Annexure 2				

Table 7: Observation of the Innovativeness Score of the Respondents (Data obtained from Annexure 3)				
Total no. of samples	Sum of scores before training (Xi)	Sum of scores after training (Yi)	Difference in the scores (Di = Xi - Yi) ΣDi	ΣD^2
28	1323	1390	-67	419
Source: Primary Data				

Table 8 : Calculation of the value of "t" for the Innovative Factor				
Mean of difference D	S.D of difference	t-calculated	t-tabulated	Findings
-2.393	3.095	-4.0905	-1.703	Null Hypothesis Rejected
Source: Calculation shown in Annexure 3				

Table 9: Observation of the Scores of the Personal Control Factor (Data obtained from Annexure 4)				
Total no. of samples (N)	Sum of scores before training (Xi)	Sum of scores after training (Yi)	Difference in the scores (Di = Xi - Yi)= ΣDi	ΣD^2
28	1334	1388	-44	352
Source: Primary Data				

Table 10: Calculation of the value of "t" for the Personal Control Factor				
Mean of difference (D)	S.D of difference	t-calculated	t-tabulated	Findings
-1.571	3.2369	-2.568	-1.703	Null Hypothesis Rejected
Source: Calculation shown in Annexure 4				

Table 11: Observation of the Scores of the Self Esteem Factor of the Respondents (Data obtained from Annexure 5)				
Total no. of samples (N)	Sum of scores before training (Xi)	Sum of scores after training (Yi)	Difference in the scores (Di = Xi - Yi) ΣDi	ΣD^2
28	1236	1326	-90	516
Source: Primary Data One sided t-test is applied				

Table 12: Calculation of the value of 't' for the Self Esteem Factor				
Mean of difference (D)	S.D of difference	t-calculated	t-tabulated	Findings
-3.214	2.898	-5.868	-1.703	Null Hypothesis Rejected
Source: Calculation shown in Annexure 5				

t-calculated = -5.86 ; t- tabulated = -1.703. From the observations of the Table 11, the value of 't' for the impact of the Self Esteem factor on potential entrepreneurs before and after the session had been calculated and is shown in the Table 12. The observed value of t = -5.868 (as shown in Table 12) falls in the rejection region, and hence, the H5 was rejected at 5% significance level, and it was concluded that the various short term developmental programmes had a positive impact in enhancing the Self Esteem of the respondents. Self Esteem is an inherent trait of an individual, which when redirected in a positive direction, can make one achieve wonders.

CONCLUSION AND SUMMARY

The relationship between developmental courses and attitude development of potential entrepreneurs was established

in this study (see Table 4, Table 6, Table 8, Table 10, and Table 12). Though the sample size was small due to time and batch constraints, it indicates that the actual and potential capacity of an individual is encouraged and enhanced by the use of self-development programs. Many demographic factors like gender, parents' qualification, various income groups and business families do affect the intentions of an individual, but some traits can be acquired through proper training and developmental sessions.

It was observed that today's young adults gave a positive reaction in accepting entrepreneurship as a career option. Nowadays, entrepreneurial education and self developmental sessions are the need of the hour; especially in a developing country like India. Moreover, all the states of the country - whether they are metros, hi-tech cities or small developing states, need to provide equal opportunities to each and every individual for the all round regional development of the country. Entrepreneurship education should be made compulsory from senior secondary school level so that the foundation to excel mentally is imbibed in the young adults of the country. At the university level, practical training should be a compulsory part to develop and tune the existing inherent qualities of the potential entrepreneurs. This will lead to better work- life balance, reduce stress, reduce unemployment and encourage involvement in self-employment. Thompson (2004) rightly said that successful entrepreneurs require a combination of temperament, talent and technique. The techniques can be inculcated through proper exposure and training. Hence, a deeper understanding of the existing entrepreneurial attitude and intention of potential entrepreneurs can make a significant contribution to the development of the nation. With the help of the government and our personal zeal, we can promote an entrepreneurial culture in our country.

LIMITATIONS OF THE STUDY

The major limitation of the study was the difficulty faced in convincing the respondents to undergo the developmental session of 3 months. Many respondents thought it to be a waste of time as it was not a part of the curriculum and neither were they getting a certificate after undergoing the session. It was difficult to make them understand the importance of self developmental programmes. Secondly, the students were divided in two different batches under the guidance of two different experts. Students can be judged best when they are exposed to the same trainer, but this was not possible as the batch size was limited to 15 students only. The inferences were drawn exclusively on the basis of the developmental sessions and the effect of culture and social systems - which do have a great effect on the entrepreneurial attitude of potential entrepreneurs - were not taken into consideration. The study was restricted to a set of students belonging to a single university.

SCOPE FOR FUTURE RESEARCH

The scope of the study can be extended by studying the difference of impact of the developmental programmes on males and females. The effect of entrepreneurial education in promoting the youngsters towards taking Entrepreneurship as a career option can also be studied as this can serve as the foundation stone for the growth of the nation. A variety of developmental and training packages based on family backgrounds, cultural values and the social environment of potential entrepreneurs can be studied and their impact can be analyzed. Future studies - for generating more generalized and significant conclusions - could take larger samples from various universities and programmes of study.

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ANNEXURES

Annexure 1: Observation of Overall Entrepreneurial Score of 28 Respondents				
SERIAL NO.	SUM OF THE SCORE OF INDIVIDUAL RESPONDENTS BEFORE SESSION(Xi)	SUM OF THE SCORE OF INDIVIDUAL RESPONDENTS AFTER SESSION(Yi)	DIFFERENCE (D= Xi-Yi)	D ²
1	166	186	-20	400
2	179	200	-21	441
3	183	199	-16	256
4	197	194	+3	9
5	190	193	-3	9
6	174	185	-11	121
7	191	193	-2	4
8	198	210	-12	144
9	207	208	-1	1
10	190	207	-17	289
11	171	191	-20	400
12	199	205	-6	36
13	179	189	-10	100
14	193	206	-13	169
15	167	180	-13	169
16	177	182	-5	25
17	165	181	-16	256
18	203	196	+7	49
19	183	205	-22	484
20	193	203	-10	100
21	164	177	-13	169
22	192	206	-14	196
23	196	210	-14	196
24	186	190	-4	16
25	178	186	-8	64
26	193	195	-2	4
27	181	193	-12	144
28	202	205	-3	9
	ΣXi=5197	ΣYi=5475	ΣD= -278	ΣD²=4260
<p>Calculation of the value of “t” (As shown in Table 4) Mean of the difference (D) = $\Sigma D/n = -278/28 = -9.93$ S.D of the difference = $\sqrt{\frac{\Sigma Di^2 - (D)^2}{n-1}}$ $\sigma = \sqrt{4260 - (-9.93)^2 \cdot 28/27} = 7.45$ Hence $t = -9.93 - 0/7.45\sqrt{28}$ $= -9.93/1.4079 = -7.05$ Degree of freedom = $(n-1) = (28 - 1 = 27)$ t-tabulated = -1.703 t-calculated= -7.05</p> <p>As the alternate hypothesis is one sided, the researcher applied a one tailed test (in the left tail) for determining the rejection region at 5% level of significance.</p> <p style="text-align: center;">R: $t < -1.703$</p> <p>The observed value of t is -7.05 which falls in the rejection region and thus, the researcher rejects Ho at 5% significance level and concludes that the developmental programs are effective in improving the entrepreneurial attitude of the potential entrepreneurs.</p>				

Annexure 2: Observation of the Overall Achievement Score of the 28 Respondents				
SERIAL NO.	SUM OF THE SCORE OF INDIVIDUAL RESPONDENTS BEFORE SESSION(Xi)	SUM OF THE SCORE OF INDIVIDUAL RESPONDENTS AFTER SESSION(Yi)	DIFFERENCE (D= Xi-Yi)	D ²
1	42	46	-4	16
2	44	50	-6	36
3	46	49	-3	9
4	54	54	0	0
5	47	49	-2	4
6	49	49	0	0
7	46	48	-2	4
8	47	54	-7	49
9	49	50	-1	1
10	46	48	-2	4
11	43	44	-1	1
12	48	48	0	0
13	48	50	-2	4
14	45	47	-2	4
15	46	48	-2	4
16	54	50	+4	16
17	36	40	-4	16
18	47	44	+3	9
19	50	54	-4	16
20	45	49	-4	16
21	37	38	-1	1
22	46	52	-6	36
23	48	52	-4	16
24	46	51	-5	25
25	47	48	-1	1
26	46	54	-8	64
27	48	50	-2	4
28	54	54	0	0
	Σ Xi=1304	Σ Yi=1370	Σ D= -66	356
<p>Calculation of the value of "t" (As shown in table 6)</p> $D = -66/28 = -2.357$ $\infty = \sqrt{356 - (2.357)^2 * 28 / 27} = \sqrt{356 - 155.55} = \sqrt{7.42} = 2.72$ $t = -2.357 - 0 / 2.72 / \sqrt{28} = -4.586$ <p>t- calculated = - 4.586</p> <p>t tabulated at 27 degree of freedom = - 1.703</p>				

Annexure 3: Observation of the Overall Innovation Score of the 28 Respondents				
SERIAL NO.	SUM OF THE SCORE OF INDIVIDUAL RESPONDENTS BEFORE SESSION(Xi)	SUM OF THE SCORE OF INDIVIDUAL RESPONDENTS AFTER SESSION(Yi)	DIFFERENCE (D= Xi-Yi)	D ²
1	43	46	-3	9
2	48	53	-5	25
3	44	46	-2	4
4	49	47	+2	4
5	48	48	0	0
6	37	44	-7	49
7	51	53	-2	4
8	49	51	-2	4
9	59	58	+1	1
10	48	53	-5	25
11	38	50	-12	144
12	48	50	-2	4
13	46	46	0	0
14	52	53	-1	1
15	42	47	-5	25
16	47	47	0	0
17	45	47	-2	4
18	51	49	+2	4
19	40	46	-6	36
20	52	54	-2	4
21	39	43	-4	16
22	52	54	-2	4
23	49	54	-5	25
24	48	51	-3	9
25	48	50	-2	4
26	48	51	-3	9
27	46	48	-2	4
28	50	51	-1	1
	Σ Xi = 1323	Σ Yi = 1390	Σ D = - 67	Σ D² = 419
<p>Calculation of the value of "t" (Table 8)</p> <p>Mean of D = -67/28 = -2.393</p> <p>S.D = 3.095</p> <p>t- calculated = - 4.0905</p> <p>t- tabulated at 27 degrees of freedom = - 1.703</p>				

Annexure 4: Observation of the Overall Personal Control Score of the 28 Respondents				
SERIAL NO.	SUM OF THE SCORE OF INDIVIDUAL RESPONDENTS BEFORE SESSION(Xi)	SUM OF THE SCORE OF INDIVIDUAL RESPONDENTS AFTER SESSION(Yi)	DIFFERENCE (D= Xi-Yi)	D ²
1	43	48	-5	25
2	45	47	-2	4
3	45	48	-3	9
4	46	48	-2	4
5	49	50	-1	1
6	43	46	-3	9
7	48	47	+1	1
8	54	56	-2	4
9	52	52	0	0
10	51	54	-3	9
11	42	45	-3	9
12	58	60	-2	4
13	45	49	-4	16
14	53	55	-2	4
15	39	43	-4	16
16	36	42	-6	36
17	44	50	-6	36
18	52	50	+2	4
19	46	54	-8	64
20	56	54	+2	4
21	46	51	-5	25
22	49	51	-2	4
23	45	47	-2	4
24	46	40	+6	36
25	51	53	-2	4
26	54	54	0	0
27	46	48	-2	4
28	50	46	+4	16
	Σ Xi=1334	Σ Yi=1388	Σ D= - 44	Σ D² = 352
<p>Calculation of the value of 't' (Table 10) Mean of D = -44/28 = - 1.571 S.D of difference = 3.2369 t- calculated = -2.568 t - tabulated at 27 degrees of freedom = -1.703</p>				

Annexure 5: Observation of the Overall Self Esteem Score of the 28 Respondents				
SERIAL NO.	SUM OF THE SCORE OF INDIVIDUAL RESPONDENTS BEFORE SESSION(Xi)	SUM OF THE SCORE OF INDIVIDUAL RESPONDENTS AFTER SESSION(Yi)	DIFFERENCE (D= Xi-Yi)	D ²
1	38	46	-8	64
2	42	50	-8	64
3	48	56	-8	64
4	48	45	+3	9
5	46	46	0	0
6	45	46	-1	1
7	46	45	+1	1
8	48	49	-1	1
9	47	48	-1	1
10	45	52	-7	49
11	48	52	-4	16
12	45	47	-2	4
13	40	44	-4	16
14	43	51	-8	64
15	40	42	-2	4
16	40	43	-3	9
17	40	44	-4	16
18	53	53	0	0
19	47	51	-3	9
20	40	46	-6	36
21	42	45	-3	9
22	45	49	-4	16
23	54	57	-3	9
24	46	48	-2	4
25	37	40	-3	9
26	43	44	-1	1
27	36	42	-6	36
28	44	46	-2	4
	$\Sigma Xi=1236$	$\Sigma Yi=1326$	$\Sigma D= -90$	$\Sigma D^2 = 516$
Calculation of the value of "t" (Table 12) Mean of D = $-90/28 = -3.214$ S.D of difference = 2.898 t - calculated = -5.868 t- tabulated at 27 degree of freedom = -1.703				