4 Analysis and Interpretation of the Data

The present study deals with the analysis of the data. The sample taken was a purposive sample to enhance the lamination through vocational training. The subject taken was a 28 year old mild intellectually challenged student of TEPSE & HEPSN Center (Teacher Preparation in Special Education & Higher Education for Persons with Special Needs) of Jai Narain Vyas University, Jodhpur. The qualitative & quantitative analysis & interpretation of data were done on the basis of objectives of the research.

4.1 Qualitative analysis

The present study deals with vocational, social and motor skills development in the subject. The sample taken is a purposive sample to enhance the lamination through vocational training. The subject taken was a 28 year old mild intellectually challenged student of TEPSE & HEPSN Center (Teacher Preparation in Special Education & Higher Education for Persons with Special Needs) of Jai Narain Vyas University, Jodhpur. The subject was selected from the pre-vocational group of the center. The sample has no exposure to the vocational training of lamination. Gross motor activity of the subject was normal. Fine motor movements were not up to the level of the expertise. No prior knowledge was seen regarding the use of the lamination machine; however, the subject has theoretical knowledge of what lamination machine is used for. The family members of the subject also took keen interest towards enhancing his skills in lamination. Subject was also willingly interested for taking part in the activity and the steps of the training enthusiastically. On the basis of the scale used by the investigator four evaluation tests in four constant days were conducted on the subject before the treatment of training to know the base level of the subject. After the treatment of 30 days continuously, two post tests were conducted to see the difference between pre and post exposure level of the subject. Withdrawal of 15 days was given to the subject and then third post-test was conducted on him. After third post test a treatment of 10 days was given to the subject and after this treatment, the final post-test was conducted on the subject to evaluate the significance of overall vocational training on him. The positive effects of vocational training in the subject were seen. The above training given to the subject proves that the training of

vocational skills as well as other skills like gross motor, fine motor and social interaction was too required for overall development of the subject in any vocation.

4.2 Quantitative Analysis

This sections deals with distribution of scores for different variables for mild intellectually challenged person. The mean is calculated for each category between pre and post test session's scores. Group't' value calculated to know about the significance difference between pre post test sessions for the entire five variable.

Objective 1: To develop the gross motor skills of Mild Intellectually Disabled Person

Hypotheses 1 : There will be significant difference between the average score of pre and post test for gross-motor skills.

Figure-14: Gross Motor Skills of Intellectually Disabled Person

Gross Motor Skills

	1	2	3
M1- Pre Test	100	100	30
M2- Post Test	100	100	75

Item Number
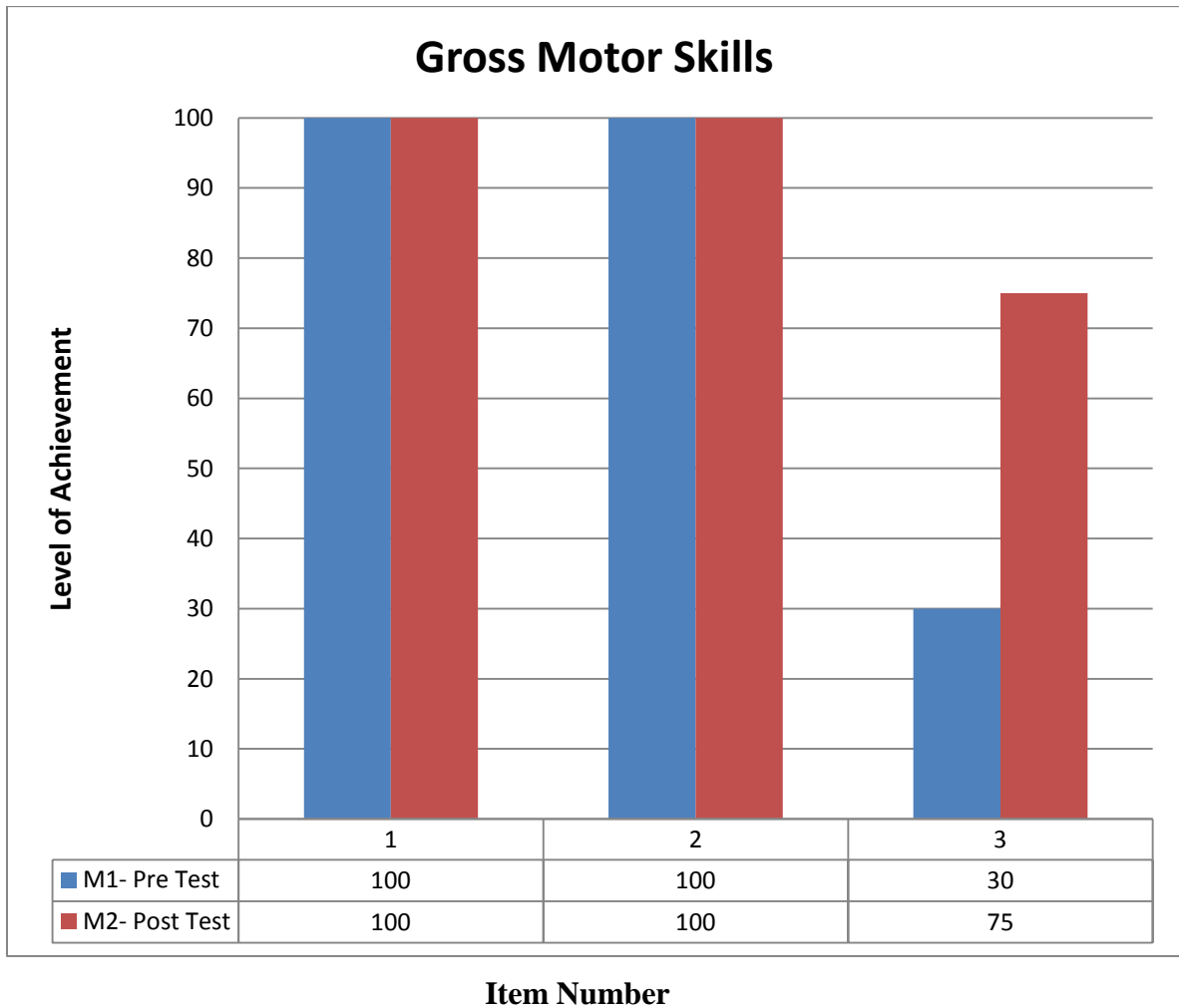
Table No. 6 *Distribution of Scores For Different Variables (Gross Motor Skills) For Mild Intellectually Disabled Person*

		1	2	3	Total
Post-Tests	% of Mean	100	100	75	91.67
	Mean of Test 1 & 4	5	5	3.75	13.75
	Test- 4	5	5	4	14
	TREATMENT				
	Test- 3	5	5	4	14
	TREATMENT				
	Test- 2	5	5	4	14
	Test- 1	5	5	3	13
TREATMENT					
Pre-Tests	% of Mean	100	100	30	76.67
	Mean of 4 Test	5	5	1.5	11.5
	Test- 4	5	5	2	12
	Test- 3	5	5	2	12
	Test- 2	5	5	1	11
	Test- 1	5	5	1	11
	Item No.	1	2	3	Total

The above table & figure highlights the Mean score for Gross motor skills like "stands unsupported", "pushes or pulls furniture as per requirement". Total of sub-skills test containing **Mean= 11.50** and **Percentage of Mean= 76.67 %** for pre-test sessions. The table highlights the mean score for test sessions for total sub-skills containing **Mean=13.75 and Percentage of Mean= 91.67 %.** It is clear from the table that the subject has enhanced the skills of Gross Motor activity like pushes & pulls furniture as

per requirement in his daily routine and in work situation. The first investigation treatment shows that the **Gross motor skills** tests for all items have obtained **Mean= 3.83, SD= 2.02, S.E.M.= 1.66** on the pre-test sessions, whereas per post test sessions **Mean= 4.50, SD= 0.86, S.E.M.= 0.50**. The calculated **"t"** value is 1 and it is not significant. Therefore, the formulated hypothesis **"There will be significant difference between average score of pre and post test for Gross Motor Skills"** is not accepted. It shows that no remarkable changes have been shown after the training as the subject had prior knowledge of gross motor skills.

Objective No. 2 To development of fine motor skills of Mild Intellectually Disabled Person.

Hypotheses 2: There will be significant difference between the average score of pre and post test for fine-motor skills.

Figure-15: Fine Motor Skills of Intellectually Disabled Person

Fine Motor Skills

Item number	1	2	3	4	5
M1- Pre Test	30	25	25	20	20
M2- Post Test	60	60	60	50	60

Level of Achievement

Item number
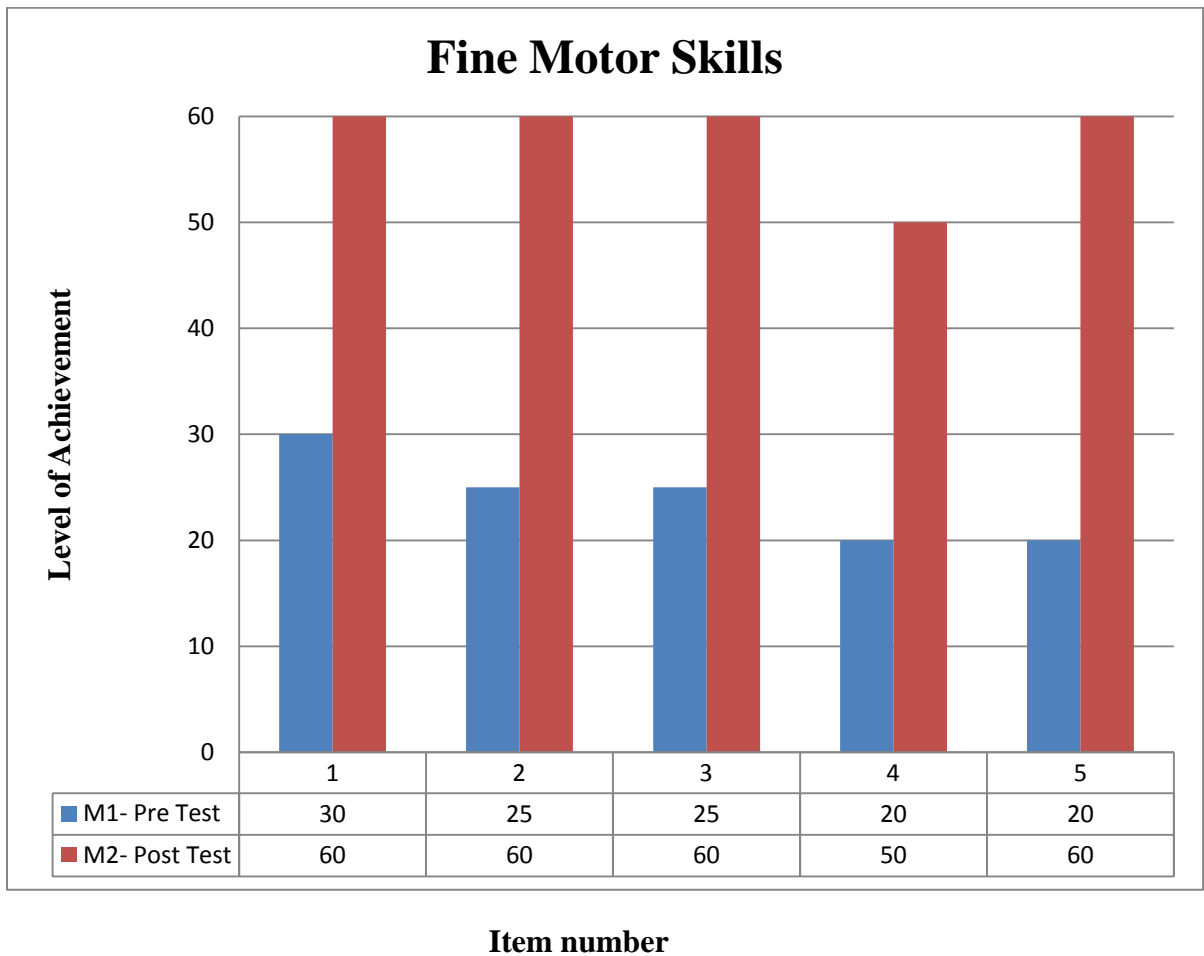
Table No. 7 Distribution Of Scores For Different Variables (Fine Motor Skills) For Mild Intellectually Challenged Person

		Item 4	Item 5	Item 6	Item 7	Item 8	Total
Post-Tests	**% of Mean**	60	60	60	50	60	58
	Mean of Test 1 & 4	3	3	3	2.5	3	14.5
	Test-4	4	4	4	3	4	19
	Withdrawal						
	Test-3	3	3	3	3	3	15
	Treatment						
	Test-2	3	3	3	2	3	14
	Test-1	2	2	2	2	2	10
	Treatment						
Pre-Tests	**% of Mean**	30	25	25	20	20	24
	Mean of 4 Test	1.5	1.25	1.25	1	1	6
	Test-4	2	2	2	1	1	8
	Test-3	2	1	1	1	1	6
	Test-2	1	1	1	1	1	5
	Test-1	1	1	1	1	1	5
	Item No.	4	5	6	7	8	Total

The above Table & Figure 2 shows the Mean Score for Fine Motor skills like "use of a pair of scissors", "use thumb and fingers to pick-up the object". Total of sub-skills test containing **Mean= 6 and Percentage of Mean= 24%** for pre-test sessions. The table highlights the mean score for post test sessions for total sub-skills **containing Mean = 14.5 and Percentage of Mean= 58%**. It is clear from the table that the subject has

development of fine motor skills like folding the sheets as required, cutting the laminated sheets appropriately, uses fingers to operate the power switches and buttons on machines. These type of fine motor activities are not only helpful in upbringing the mental confidence of the subject but also helpful in his day to day life. The second investigation treatment shows that the fine motor skills tests for all the items have achieved **Mean= 1.20, SD=0.20 and S.E.M. = 0.09** whereas for post test sessions the **Mean=3.80, SD=0.44** and **S.E.M. =0.20**. The significant difference between the mean of pre & post sessions **('t' = 15.33 > p 0.01).** Therefore, the formulated hypotheses **"There will be significant difference between the average score of pre and post test for fine-motor skills."** is accepted. It shows that continuous training plays important role in learning of fine motor skills. Training not only develops the practice and expertise on the particular skills but also develops to concentrate on a particular task for a long time.

Objective 3: To develop adequate social Interaction skills.

Hypotheses 3: There will be significant difference between the average score of pre and post test for social interaction skills.

Figure No. 16: Social Skills of Intellectually Disabled Person

Social Skills

Item Number	1	2	3	4	5
M1- Pre Test	20	30	30	20	20
M2- Post Test	70	75	80	80	75

Item Number
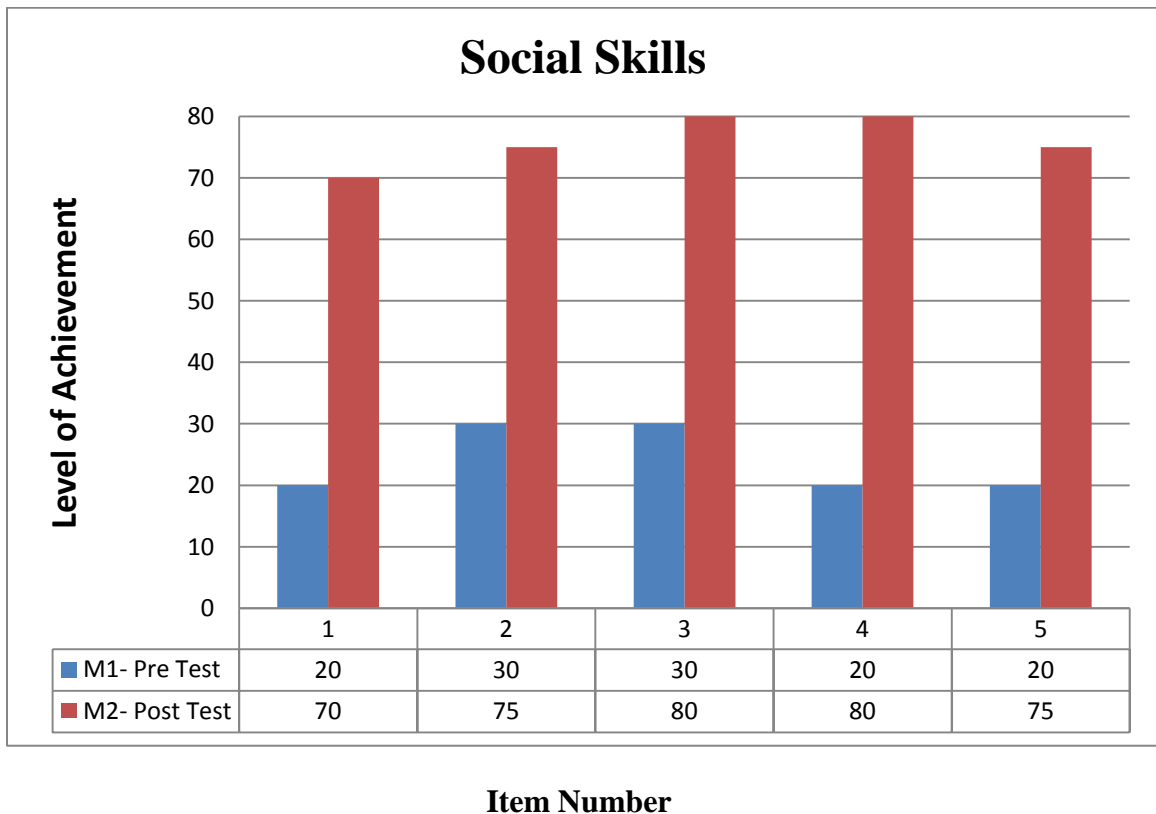
Table No. 8 Showing Mean scores of all pre and post test for Social Skills for Mild Intellectually Challenged Person

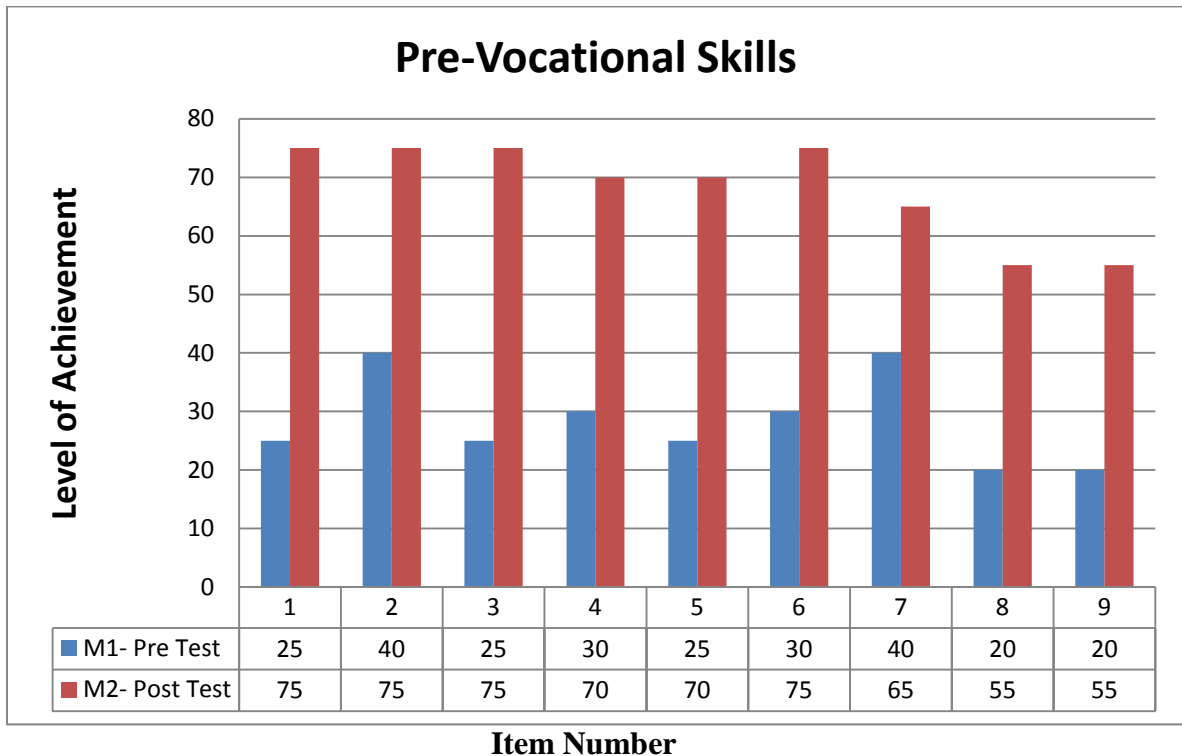|		9	10	11	12	13	Total
Post-Tests	**% of Mean**	70	75	80	80	75	76
	Mean of Test 1 & 4	3.5	3.75	4	4	3.75	19
	Test-4	4	4	5	5	4	22
	Treatment						
	Test-3	4	4	4	4	4	20
	Withdrawal						
	Test-2	3	4	4	4	4	19
	Test-1	3	3	3	3	3	15
	Treatment						
Pre-Tests	**% of Mean**	20	30	30	20	20	24
	Mean of 4 Test	1	1.5	1.5	1	1	6
	Test-4	1	2	2	1	1	7
	Test-3	1	2	2	1	1	7
	Test-2	1	1	1	1	1	5
	Test-1	1	1	1	1	1	5
	Item No.	9	10	11	12	13	Total

The above t**able & figure** indicated that Mean Score for Social skills like greets other upon meeting either verbally or non-verbally, Saying sorry, thank you, please at appropriate places and when required etc. total of sub-skills test containing **Mean= 6 and**

Percentage of Mean= 24% for pre-test sessions. The table highlights the mean score for post test sessions for total sub-skills containing **Mean= 19 and Percentage of Mean= 76%**. It is clear from the table that the subject has gained social skills like greeting the guests, unknown person using appropriate salutations, adjustment in environment. The third investigation treatment shows that the social skill tests, all the items have got **Mean= 1.41, SD=0.37, S.E.M. = 0.12** whereas for post test sessions the **Mean = 3.41, SD= 0.41 and S.E.M. = 0.13**. The significance difference between the mean of pre & post session **('t'=14.47 > p 0.01).** Therefore the formulated hypothesis **"There will be significant difference between the average score of pre and post test for social interaction skills."** is accepted. It shows that after the training all the five items on social skills is enhanced through social skill training. These skills develop confidence in the subject to tackle with the environment and increase the perception of the happenings around their environment.

Objective 4: To prepare the adolescent (Mild Intellectually Disabled Person) for Pre Vocational Skills i.e. to handle lamination machine effectively.

Hypotheses 4: There will be signification difference between the average score of pre and post test for pre-vocational skills.

Figure No. 17: Pre-Vocational Skills of Intellectually Disabled Person

Pre-Vocational Skills

Item Number	1	2	3	4	5	6	7	8	9
M1- Pre Test	25	40	25	30	25	30	40	20	20
M2- Post Test	75	75	75	70	70	75	65	55	55

Item Number

Table No. 9: Showing Mean scores of all pre and post test for pre-vocational skills

Table 4: Showing Mean scores of all pre and post test for pre-vocational skills

		14	15	16	17	18	19	20	21	22	Total
Post-Tests	% of Mean	75	75	75	70	70	75	65	55	55	68.33
	Mean of test 1 & 4	3.75	3.75	3.75	3.5	3.5	3.75	3.25	2.75	2.75	30.75
	Test-4	5	5	5	4	4	5	4	4	4	40
	Treatment										
	Test-3	4	4	4	3	3	4	3	3	3	31
	Withdrawal										
	Test-2	3	3	3	3	3	3	3	2	2	25
	Test-1	3	3	3	3	3	3	3	2	2	25
	Treatment										
Pre-Tests	% of Mean	25	40	25	30	25	30	40	20	20	28.33
	Mean of 4 Test	1.25	2	1.25	1.5	1.25	1.5	2	1	1	12.75
	Test-4	2	2	2	2	2	2	2	1	1	16
	Test-3	1	2	1	2	1	2	2	1	1	13
	Test-2	1	2	1	1	1	1	2	1	1	11
	Test-1	1	2	1	1	1	1	2	1	1	11
	Item No.	14	15	16	17	18	19	20	21	22	Total

The above table & figure specified that Mean Score for Pre-Vocational skills like "Follows three steps directions such as standup, open the flap cover, place the pouch in it." Total of sub-skills test containing **Mean= 6 and Percentage of Mean= 24** for pre-test sessions. The table highlights the mean score for post test sessions for total sub-skills containing **Mean=14.5 and Percentage of Mean= 58**. It is clear from the table that the subject has improved the skills of Pre-vocational activities that the subject follows the sequence of activities in the routine work skills. Pre-vocational skills are those skills which are helpful and very essential prior to train the subject a vocation. Pre-vocational skills are the base for the vocational skills. The fourth investigation treatment shows that the pre-vocational skills tests for all the items have achieved **Mean=1.20, SD=0.27, S.E.M. = 0.09.** The significant difference between the mean of pre & post sessions (**'t' = > p 0.01**). Therefore, the formulated hypothesis **"There will be significant difference between the average score of pre and post test for pre-vocational skills."** is accepted. It shows that continuous training plays vital role in learning of social skills. This skill is a pre-step towards the vocational independency. This type of training helps not only in vocational life but also in the subject's daily life.

Objective 5: To develop the Lamination Skill perfectly.

Hypotheses 5: There will be significant difference between the average score of pre and post test for skills for lamination machine.

Figure No. 18: Lamination Skills of Intellectually Disabled Person

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
M1- Pre Test	25	25	30	25	30	20	20	20	20	20	20	30	20	20	30	25	30	20
M2- Post Test	75	75	75	75	80	75	55	65	55	65	60	75	55	55	75	75	70	75
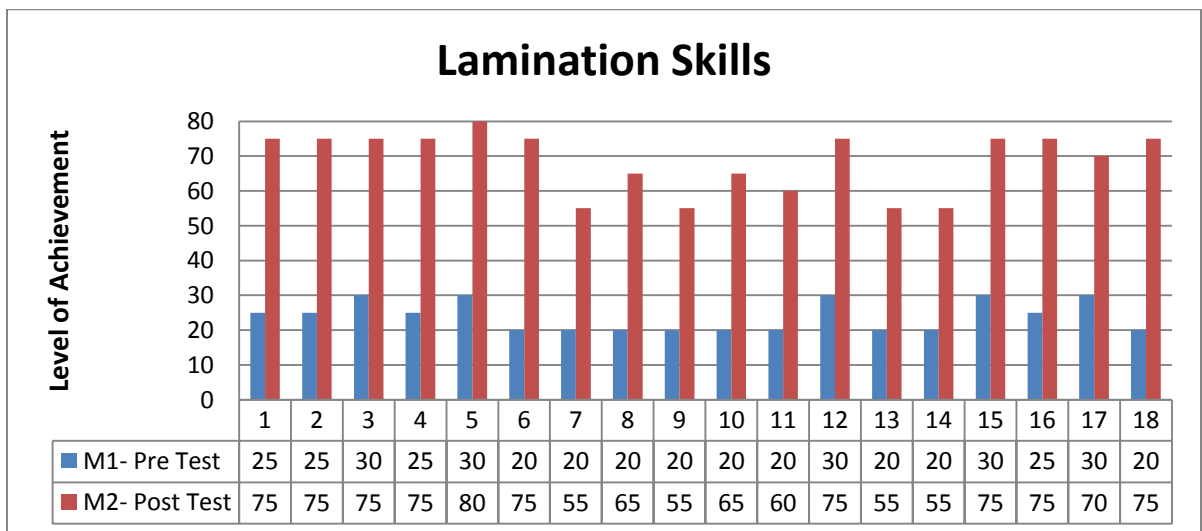
Table 10: Showing Mean scores of all pre and post test for Lamination Skills

Table 5: Showing Mean scores of all pre and post test for Lamination Skills.

Post-Tests

Item No.	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	Total
Test-1	3	3	3	3	3	2	2	2	2	2	2	3	2	2	3	3	3	3	46
Treatment																			
Test-2	3	3	3	3	3	3	2	3	2	3	3	3	2	2	3	3	3	3	50
Withdrawal																			
Test-3	4	4	4	3	4	4	3	4	3	4	3	4	3	3	4	4	4	4	66
Treatment																			
Test-4	5	5	5	4	5	4	4	4	4	4	4	5	4	4	5	5	4	5	80
Mean of Test 1 & 4	3.75	3.75	3.75	3.75	4	3.75	2.75	3.25	2.75	3.25	3	3.75	2.75	2.75	3.75	3.75	3.5	3.75	61.75
% of Mean	75	75	75	75	80	75	55	65	55	65	60	75	55	55	75	75	70	75	68.61

Pre-Tests

Item No.	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	Total
Test-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18
Test-2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18
Test-3	1	1	2	1	2	1	1	1	1	1	1	2	1	1	2	1	2	1	23
Test-4	2	2	2	2	2	1	1	1	1	1	1	2	1	1	2	2	2	1	27
Mean of 4 test	1.25	1.25	1.5	1.25	1.5	1	1	1	1	1	1	1.5	1	1	1.5	1.25	1.5	1	20.5
% of Mean	25	25	30	25	30	20	20	20	20	20	20	30	20	20	30	25	30	20	22.76

The above table & figure shows the Mean Score for Laminating Skills like "turn the temperature control to desired position" "cut the laminated sheet appropriately". Total of sub-skills test containing Mean= 20.5 and Percentage of Mean= 22.78% for pre-test sessions. The table highlights the mean score for post test sessions for total sub-skills containing Mean= 61.75 and Percentage of Mean= 68.61%. it is clear from the table and the graphical presentation that the subject has improved the skills of lamination activities like folding the sheet according to the size of document, cutting the laminated sheet, if required, appropriately. The fifth investigation treatment shows that the lamination skills, tests for all the items have achieved M= **1.16, SD= 0.21, S.E.M. = 0.12.** The significant difference between the mean of pre & post sessions **('t' = 26.60 > p 0.01).** Therefore, the formulated hypothesis **"There will be significant difference between the average score of pre and post test for skills for lamination machine."** is accepted. It shows that continuous training plays vital role in developing "lamination" skills. Vocational skill is a step towards inclusion in the society. The subject will develop his skills more by practicing the steps in the training. These skills were not only helpful to subject in vocational aspects but also helps through enrichment of various behavioural skills to live life independently.

Table 11: Showing the significant difference between Pre and Post Test for all Sub-skills.

Sub-Skills		Mean	Standard Deviation	Standard Error Mean	"t"
Gross Motor Skills	Pre-test	3.83	2.02	1.16	1.00
	Post-test	4.50	0.86	0.50	
Fine Motor Skills	Pre-test	1.20	0.20	0.09	15.33
	Post-test	3.80	0.44	0.20	
Social Skills	Pre-test	1.41	0.37	0.12	14.47
	Post-test	3.41	0.41	0.13	
Pre-Vocational Skills	Pre-test	1.20	0.27	0.12	20.39
	Post-test	3.80	0.20	0.09	
Laminating Skills	Pre-test	1.16	0.21	0.05	26.60
	Post-test	3.32	0.46	0.12	

Table 11 represents overall Mean values and significant difference for respective categories (skills) for Pre and Post sessions. On **Gross motor skills** tests for all items have obtained Mean= **3.83, SD= 2.02, S.E.M.= 1.66** on the pre-test sessions, whereas per post test sessions **Mean= 4.50, SD= 0.86, S.E.M.= 0.50**. The calculated **"t**" value is 1 and it is not significant. Therefore, the formulated hypothesis "There will be significant difference between average score of pre and post test for Gross Motor Skills" is not accepted. It reveals that no remarkable changes have been shown after the training as the subject had prior knowledge of gross motor skills. Though it was found the subject has shown improvement in the skills like using and movements of furniture as and when required.

On fine motor skills tests for all the items (i.e. 5 items) have achieved **M= 1.20, SD=0.20 and S.E.M. = 0.09** whereas for post test sessions the **M=3.80, SD=0.44** and **S.E.M. =0.20**. The significant difference between the mean of pre & post sessions **('t' = 15.33 > p 0.01).** Therefore, the formulated hypotheses "there will be significant difference between the average score of pre and post test for fine-motor skills." is accepted. It shows that continuous training plays important role in learning of fine motor skills. Training not only develops the practice and expertise on the particular skills but also develops to concentrate on a particular task for a long time. Training of fine motor activities not only helps subject in his vocational life but also very helpful in his day to day life.

On social skill tests, all the items (i.e. 5 items) have got **Mean= 1.41, SD=0.37, S.E.M. = 0.12** whereas for post test sessions the **Mean = 3.41, SD= 0.41 and S.E.M. = 0.13**. The significance difference between the mean of pre & post session **('t'=14.47 > p**

0.01) Therefore the formulated hypothesis "There will be significant difference between the average score of pre and post test for social interaction skills." is accepted. It shows that after the training all the five items on social skills is enhanced through social skill training. These skills develop confidence in the subject to tackle with the environment and increase the perception of the happenings around their environment. Social skill helps subject to develop his cognitive skills too and which helps the subject to move a step ahead on the way towards inclusion.

On pre-vocational skills tests for all the items (i.e. 9 items) have achieved **M=1.20, SD=0.27, S.E.M. = 0.09.** The significant difference between the mean of pre & post sessions **('t' = > p 0.01).** Therefore, the formulated hypothesis "There will be significant difference between the average score of pre and post test for pre-vocational skills." is accepted. It shows that continuous training plays vital role in learning of social skills. This skill is a pre-step towards the vocational independency. This type of training helps not only in vocational life but also in the subject's daily life.

On lamination skills, tests for all the items (i.e. 18 items) have achieved M= **1.16, SD= 0.21, S.E.M. = 0.12.** The significant difference between the mean of pre & post sessions **('t' = 26.60 > p 0.01).** Therefore, the formulated hypothesis "There will be significant difference between the average score of pre and post test for skills for lamination machine." is accepted. It shows that continuous training plays vital role in developing "lamination" skills. Vocational skill is a step towards inclusion in the society. The subject will develop his skills more by practicing the steps in the training. These skills were not only helpful to subject in vocational aspects but also helps through enrichment of various skills to live life independently. Subject has showed tremendous

level of achievement in post training evaluation in the items like-setting the machine on required heat position, cutting the sheet according to the size of the paper, entering the pouch appropriately, cutting the laminated sheet appropriately when required.