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Enhancing Emotional Intelligence through Expression of Navarasa

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Abstract

The aim of the present study was to study the impact of intervention program based on the expression of Navarasa on Emotional Intelligence of selected school children. In the developing country like India which is known as the country of young people, it is important to focus on the psycho-social aspects of the youngsters to make them compatible to deal with the pace of world. Therefore making efforts to enhance Emotional Intelligence of these youngsters has been a need of a time. Sample of the study included 144 children (64 Boys and 80 Girls) from 5th to 7th standards. Multi-stage sampling method was used. Control and experimental groups were done based on the students' scores of Emotional and General Intelligence. Intervention consisted of 34 sessions having half sessions for the expression of Navarasa through four art forms namely- Dance, Drama, Singing and Drawing. Emotional Intelligence and General Intelligence of the students were measured through standardized questionnaires. Statistical tools like- Two-way ANOVA and mixed design ANOVA were used to get results. Experimental groups scored significantly higher than the control groups in post-testing. No significant difference was found between the scores of Girls and Boys before and after the intervention program.

Keywords- Emotional Intelligence, Navarasa, Expression, Intervention, General Intelligence

1. Introduction

India is known as the youngest country in the world. The latest census released show that about 41% of India's population is below the age of 20 years¹. Every third person in Indian cities is youth. In about next 7 years the average age of India will be 29 years. By 2020 India is ready to become world's youngest country with the 64 % of its population in working age group². It is said that developing countries with large youth populations could see their economies soar, provided they invest heavily in young people's education and health and protect their rights³. Now it is our choice to decide which type of youths we want to lead our country. The present condition of our youths is very alarming. In India, about 46,000 suicides occurred each in 15–29 and 30–44 age groups in 2012. 80% of the suicide victims were literate, higher than the national average literacy rate of 74%⁴. In India, 28.65 lakh youngsters (in the age group 10-24) have suffered health loss due to depressive disorders⁵. Emotional Intelligence has been found to play very important role in all spheres of human life including mental health^{6,7}. It is a defending factor for suicidal ideation^{8,9}. Emotional Intelligence was observed to be inversely correlated with the substance use^{10,11}. Positive relationship is observed between Emotional Intelligence and academic achievement of the students^{12,13}. It was also found in one study that the academic achievement does not show future success with Emotional Intelligence¹⁴. So is the case it is very necessary to put effort on enhancement of Emotional Intelligence of the children to shape their future. Many people now days have understood the importance of the development of EI and started working on the same. But considering the need these efforts should extend at a large scale. Therefore present study aimed to develop a training program which will include four art forms as a medium for the children to express their emotions. Here it is assumed that appropriate expression of the correct emotions at right time helps to enhance emotional intelligence. Because researcher believes that the emotional problems occur due to either suppression of emotions or wrong expression of the emotions. Hence present study focuses on giving platform which is socially acceptable to the children to channel their emotional energy. General Intelligence plays important role in understanding or grasping anything. Therefore it was considered in present study while making control and experimental groups of children to avoid its confounding effect on dependent variable.

2. Methodology

2.1 Objectives-

1. To develop Intervention Program based on the expression of Navarasa for the children.
2. To measure impact of the Intervention program.
3. To find out gender differences on the impact of Intervention Program.

2.2 Hypotheses-

Null Hypotheses-

1. There is no significant difference between the scores of Emotional Intelligence of the children from experimental groups before and after the Intervention Program.
2. There is no significant difference between the scores of Emotional Intelligence of children from experimental and control groups after the intervention program.
3. There is no significant difference between the scores of Emotional Intelligence of Girls and Boys before and after the intervention program.

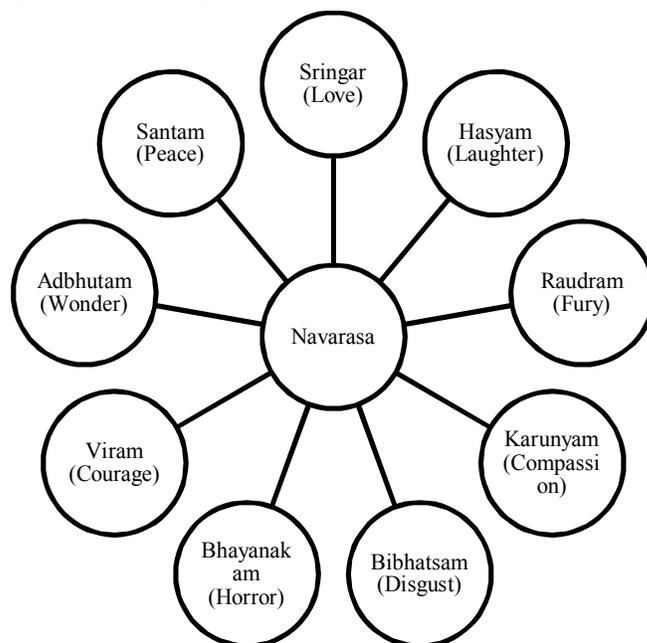
2.3 Operational definitions-

1. Emotional Intelligence-

Ability Model of Emotional Intelligence given by Mayer and Salovey is considered for present study. A standardised test based on Ability Model is used to measure Emotional Intelligence of children in this study. Here, Emotional Intelligence of the children is the scores of those children obtained on ‘JPIP How Do I Feel’ by Gadre and Lavlekar (2018). The four branches given by Ability Model are measured through this test in the form of four sections namely- Emotional Perception, Emotional Assimilation, Emotional Understanding, and Emotional Management.

2. Navarasa-

Navarasa is nine emotions given by the Theory of Rasa stated by Bharata Muni in his famous scripture Natyashastra. Bharata Muni had stated eight rasas in his famous text Natyashastra. Abhinavgupta added one rasa later in his text Abhinavbharati. These Navarasa i.e. nine emotions are- Sringar (Love), Hasyam (Laughter), Raudram (Fury), Karunyam (Compassion), Bibhatsam (Disgust), Bhayanakam (Horror), Viram (Courage), Adbhutam (Wonder), and Santam (Peace). Considering the age group of this study, Sringar rasa is not included in the intervention.



3. Gender-

In the present study Gender means two biological categories of the human beings- Male and female. Here considering the age group of the sample, present study will refer these categories as Boys and Girls.

4. General Intelligence-

In present study General Intelligence means the scores obtained by the sample on the test of- 'Standard Progressive Matrices' by J. C. Raven (2000).

2.4 Sample-

Sample of the present study included 144 children from CBSE school of Pune city. Multi-stage sampling method was used. School was selected using conventional sampling method putting the criteria like- willingness to participate in the study and cooperation from the school authority. 5th to 7th standard Girls and Boys were selected based on few things like- voluntary participation and readiness as well as availability to attend 34 sessions.

The list of the students was prepared who fulfilled the above mentioned criteria. Then the Girls and Boys were selected using random sampling technique. Then after conduction of the pre-test, control and experimental groups of both Girls and Boys were made using matched pair method based on their scores of Emotional Intelligence and General Intelligence. There were 64 boys (32 in each control and experimental groups) and 80 girls (40 in each control and experimental groups).

2.5 Tools

1. '*JPIP How Do I Feel*' by *Gadre and Lavlekar*¹⁵- This scale is based on the 'Ability Model' of Emotional Intelligence given by John Mayer and Peter Salovey (2000). Ability model is also called 'Four Branch Model'. This test has four sections based on four branches of Ability Model namely- Emotional Perception, Emotional Assimilation, Emotional Understanding, and Emotional Management. This test provides composite score of the Emotional Intelligence as well as four scores of four branches distinctly. Each question measures separate ability of Emotional Intelligence. This test is developed for and standardised on Indian population.
2. *Standard Progressive Matrices by Raven (2000)*¹⁶- This test is non-verbal estimate of Fluid Intelligence. It measures Abstract Reasoning of a person. This test contains five sets (A to E) each having 12 questions. Items in each set become increasingly complex, difficult requires greater cognitive ability to understand (encode) and analyse. This is a culture-free test.

2.6 Intervention Program-

Intervention program included expression sessions and theory sessions. Expression sessions contained expression of Navarasas through four art forms i.e. Dance, Drama, Singing and Drawing. Here four pairs of eight Rasa were made referring the theory of rasa. These all four pairs were expressed through all four art forms. Hence there were 16 sessions for expression. Theory sessions were based on four branches of Emotional Intelligence.

Therefore there were four theory sessions for each pair of rasa. So there were 16 theory sessions. First session was conducted for rapport building and second for introduction. Hence there were 34 sessions in the Intervention Program. This program was separately conducted for Girls and Boys. Art sessions were taken by the respective resource persons. The selection of the resource persons was done based on the criteria like- Experience in working with children, Understanding of research methods, Innovative teaching methods, etc.

3. Results-

Table 3.1 Descriptive statistics of pre and post testing (N = 144)

Pre-testing	Experimental	Boy	N	32	32	32	32	32
			Mean	56.8906	22.7969	5.2578	12.1406	16.6953
			SD	9.84823	4.75082	2.27759	3.14241	5.70609
		Girl	N	40	40	40	40	40
			Mean	60.6625	23.4000	5.6938	12.3000	19.2688
			SD	10.01834	3.99752	2.16209	3.83439	5.30976
		Total	N	72	72	72	72	72
			Mean	58.9861	23.1319	5.5000	12.2292	18.1250
			SD	10.05188	4.32707	2.20914	3.52050	5.60008
	Control	Boy	N	32	32	32	32	32
			Mean	55.6563	21.6719	5.2500	11.4688	17.2656
			SD	10.75661	4.78886	1.94791	3.46396	6.51269
		Girl	N	40	40	40	40	40
			Mean	59.9125	22.5375	5.6063	11.6250	20.1438
			SD	11.93714	4.28008	2.06922	3.40955	6.19085
		Total	N	72	72	72	72	72
			Mean	58.0208	22.1528	5.4479	11.5556	18.8646
			SD	11.54673	4.50148	2.01007	3.41038	6.45337
	Total	Boy	N	64	64	64	64	64
			Mean	56.2734	22.2344	5.2539	11.8047	16.9805
			SD	10.24915	4.76572	2.10229	3.29817	6.08069
Girl		N	80	80	80	80	80	
		Mean	60.2875	22.9688	5.6500	11.9625	19.7063	
		SD	10.95612	4.13773	2.10319	3.62112	5.74742	
Total		N	144	144	144	144	144	
		Mean	58.5035	22.6424	5.4740	11.8924	18.4948	
		SD	10.79809	4.42702	2.10471	3.47023	6.03207	
Post-Testing	Experimental	Boy	N	32	32	32	32	32
			Mean	94.5391	33.2422	9.7656	22.8906	28.6406
			SD	5.38034	2.10173	1.02378	2.96140	3.43953
		Girl	N	40	40	40	40	40
			Mean	92.2063	31.2563	9.6313	21.5500	29.7688
			SD	6.07588	2.95939	1.17532	3.26559	3.12321
		Total	N	72	72	72	72	72
			Mean	93.2431	32.1389	9.6910	22.1458	29.2674
			SD	5.85490	2.77973	1.10496	3.18385	3.29274
	Control	Boy	N	32	32	32	32	32
			Mean	53.6719	20.2969	5.0313	11.6406	16.7031
			SD	7.14409	3.47945	1.46154	3.81684	4.77875
		Girl	N	40	40	40	40	40
			Mean	59.2625	21.3438	5.5875	12.3250	20.0063
			SD	8.27375	3.62403	1.73256	2.90568	4.54482

	Total	Total	N	72	72	72	72	72
			Mean	56.7778	20.8785	5.3403	12.0208	18.5382
			SD	8.22875	3.57416	1.63064	3.33403	4.90395
	Total	Boy	N	64	64	64	64	64
			Mean	74.1055	26.7695	7.3984	17.2656	22.6719
			SD	21.52946	7.11977	2.69432	6.60505	7.29724
		Girl	N	80	80	80	80	80
			Mean	75.7344	26.3000	7.6094	16.9375	24.8875
			SD	18.07694	5.97349	2.51069	5.56570	6.25625
		Total	N	144	144	144	144	144
			Mean	75.0104	26.5087	7.5156	17.0833	23.9028
			SD	19.63144	6.48845	2.58682	6.02994	6.80466

Table 3.1 shows the Means, SDs, and Ns of the Girls and Boys from experimental and control groups at pre and post testing. This is an overall view of the data. This also contains branch wise obtained scores of Emotional Intelligence.

Table 3.2 Two-way ANOVA to see difference between control and experimental groups on Emotional Intelligence

Table 3.2.1 Descriptive statistics of control and experimental groups

Time	Groups	Mean	SD	N
PreTotsc	Experimental	58.9861	10.05188	72
	Control	58.0208	11.54673	72
	Total	58.5035	10.79809	144
PostTotsc	Experimental	93.2431	5.85490	72
	Control	56.7778	8.22875	72
	Total	75.0104	19.63144	144

Table 3.2.1 shows obtained Mean, SDs and Ns of the control and experimental groups at pre and post testings.

Table 3.2.2 Tests of Between Subjects Effects

	Type III Sum of Squares	Df	Mean Square	F	Sig.
Intercept	1283469.014	1	1283469.014	8817.482	.000**
Group	25218.837	1	25218.837	173.254	.000**
Error	20669.462	142	145.560		

*Significant at .05 level of significance

**Significant at .01 level of significance

Significant difference between control and experimental groups is obtained at 99% level of confidence. Here experimental group (table 3.2.1) has scored significantly higher than the control group on Emotional Intelligence.

Table 3.2.3 Tests of Within-Subjects Contrasts

		Type III Sum of Squares	df	Mean Square	F	Sig.
Time	Linear	19618.503	1	19618.503	867.303	.000**
Time * Group	Linear	22684.500	1	22684.500	1002.846	.000**
Error(Time)	Linear	3212.059	142	22.620		

In table 3.2.3, we can see that the main effect of Time and the interaction effect between Time and Group both are found to be statistically significant at the .01 level of significance ($p < .01$). This means children from both the groups have scored significantly higher at Time 2 (post-testing) than Time 1 (pre-testing). Significant interaction effect shows that the performance of the experimental and control groups was not similar across the levels of Time. This will be much clear through following graph-

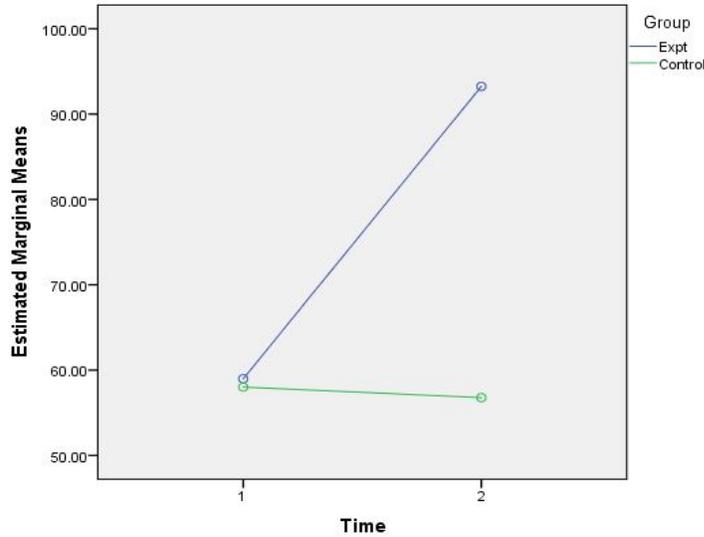


Figure 3.1 Interaction effect between Time and Groups

Figure 3.1 shows that the Control and Experimental group students have performed equal at Time 1 but Experimental group has performed considerably better at Time 2 than Control group students. Hence the interaction effect is found to be significant here. Significant main effect (table 3.2.3) of Time shows that all the students have performed high at Time 2 than Time 1. This effect is only because of the performance of the experimental group children and not of the control group children.

Table 3.3 Effect of Gender on impact of Emotional Intelligence

Table 3.3.1 Tests of Between-Subjects Effects

	Type III Sum of Squares	Df	Mean Square	F	Sig.
Intercept	823089.236	1	823089.236	7463.473	.000
Gender	18.408	1	18.408	.167	.684
Error	7719.764	70	110.282		

*Significant at .05 level of significance

**Significant at .01 level of significance

Table 3.3.1 indicates that no significant difference is obtained between the scores of Girls and Boys on Emotional Intelligence before and after the intervention program ($p > .05$).

Table 3.3.2 Tests of Within-Subjects Contrasts

		Type III Sum of Squares	Df	Mean Square	F	Sig.
Time	Linear	42556.078	1	42556.078	1936.51	.000**
Time * Gender	Linear	331.264	1	331.264	15.074	.000**
Error(Time)	Linear	1538.297	70	21.976		

*Significant at .05 level of significance

**Significant at .01 level of significance

Table 3.5.2 shows that, the main effect of Time as well as interaction effect between Time and Gender is found to be statistically significant at the .01 level of significance. This means, Girls and Boys have scored significantly higher at Time 2 than Time 1. Significant interaction effect indicates that the increase in the scores of Girls and Boys is not equal at Time 2. This will be much clear in following graph-

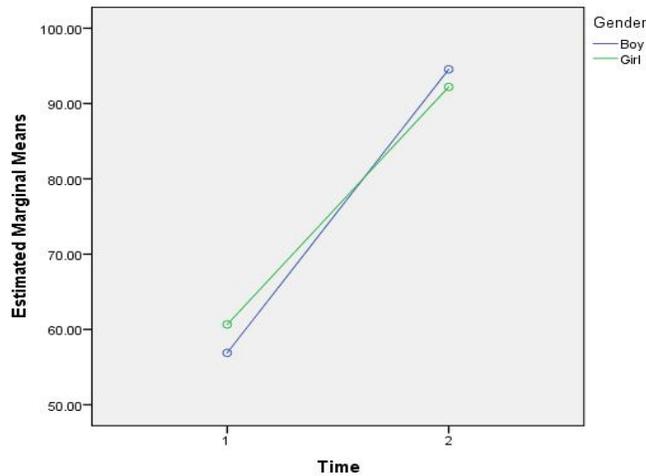


Figure 3.2 Interaction effect between Time and Gender

Figure 3.2 shows that Girls have scored better at Time 1 (pre-testing) than Boys and Boys have scored higher than Girls at Time 2 (post-testing). The scores of Girls and Boys have not increased equally at Time 2. Hence their graph lines have crossed each other and the interaction effect in them is found to be significant.

4. Discussion

Impact of Intervention on Emotional Intelligence

It is observed through tables 3.2, that there is significant increase in the scores of EI of experimental group after the intervention program. Whereas, there is little decrease in the scores of control group at post-testing. This signifies the need and effect of the intervention program. The scores of the experimental group are significantly high after the intervention program than the scores of the control group.

Intervention program was found to be successful in both quantitative and qualitative terms. The success measured in quantifying the results is explained above. But the observation mentioned during the intervention program also state its efficacy. Some of the observations are-

- This was a new perspective for the children which prompted them to look differently at their emotions. Initially they were finding it difficult but later they could identify their own and others' emotional changes, understand causal relationship between emotions and their effect on thought processes and mental state, feel the mental comfort after accepting own emotions, understand and experience causal relationship between emotions and creativity as well as performance, etc.
- In the expression sessions they were happy to participate in different art forms but when they had to think upon expressions of the emotions it was little difficult at initial sessions. But later their approach towards these arts changed and they started enjoying this method of expressing emotions freely.
- Children started using language of emotions in their day to day life.

Gender and Emotional Intelligence

Tables 3.3 indicated no significant difference between emotional intelligence of Girls and Boys before and after the intervention program. This finding is also supported by some studies where they did not find gender wise significant difference between emotional intelligence^{17 18 19 20 21 22}. This finding provides an opportunity to work equally on Emotional Intelligence of both Girls and Boys.

The significant interaction effect showed that the Boys were benefitted much than the Girls in this training program though the difference is not statistically significant. The observations made during the training program also support this finding. Boys showed great interest in the activities as well as in expression session till end. Boys were so desperate to have more sessions. They had active participation in all the sessions. Girls took little time to get into the flow of the sessions. Later they started enjoying the activities as well as expression sessions but initially they took little time than the boys to take that perspective. Girls used to have long discussions during the activities.

5. Conclusion

- Experimental group children scored significantly higher than the control group children after the Intervention Program.
- Experimental group children scored significantly higher at post-testing than pre-testing.
- Intervention program was found to be highly successful in enhancing Emotional Intelligence of the children.
- No significant difference was found between the Emotional Intelligence of Girls and Boys
- Boys were benefitted more than Girls from the Intervention Program however the difference is not found to be significant.

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