

CHAPTER – V

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Chapter V

Findings & Recommendations

5.1 Introduction

This chapter shows the table wise findings from each tool and discusses all the findings from Emotional Intelligence scale, Educational outcome for students, the chapter also recapitulates the findings and discusses the outcomes of the present study. Implications and limitations of the present study are also discussed and recommendations are provided for further research.

5.2 Table wise Findings from each Tool

5.2.1 Findings from Student's Educational outcome

The researcher had derived the following findings from the results.

1. Significant difference (at 0.05 level) was found between the experimental group and the control group on Educational Outcome with respect to Knowing (table: 4.2). The Mean score (15.3917) is high for the experimental group (table: 4.1).
2. Significant difference (at 0.05 level) was found between the experimental group and the control group on Educational Outcome with respect to Applying (table: 4.4). The Mean score (12.1917) is high for the experimental group (table: 4.3).
3. Significant difference (at 0.05 level) was found between the experimental group and the control group on Educational Outcome with respect to Reasoning (table: 4.6). The Mean score (11.5250) is high for the experimental group (table: 4.5).

4. Significant difference (at 0.05 level) was found between the experimental group and the control group on total scores of Educational Outcome (table 4.8). The Mean score (93.1083) is high for the experimental group (table: 4.7)
5. Significant difference (at 0.05 level) was found between the pre-test of experimental group and the post-test of experimental group on Educational Outcome with respect to knowing .(table: 4.10).The Mean score (15.3917) is high for the post-test of experimental group (table:4.9).
6. Significant difference (at 0.05 level) was found between the pre-test of experimental group and the post-test of experimental group on Educational Outcome with respect to Applying (table: 4.10).The Mean score (12.1917) is high for the post-test of experimental group (table: 4.9).
7. Significant difference (at 0.05 level) was found between the pre-test of experimental group and the post-test of experimental group on Educational Outcome with respect to Reasoning (table: 4.10).The Mean score (11.5250) is high for the post-test of experimental group (table: 4.9).
8. Significant difference (at 0.05 level) was found between the pre-test of experimental group and the post-test of experimental group on total scores of Educational Outcome (table: 4.10).The Mean score (39.1083) is high for the post-test of experimental group (table: 4.9).
9. Significant difference was found between the scores of boys and the scores of girls on total scores of Educational Outcome (table: 4.12). The Mean score (41.2000) is high for the boys of experimental group (table: 4.11).

10. Significant difference (at 0.05 level) was found between the scores of boys and the scores of girls on Educational outcome with respect to Knowing (table: 4.12). The Mean score (16.2167) is high for boys of experimental group (table: 4.11).
11. Significant difference was not found between the scores of boys and the scores of girls on Educational outcome with respect to Applying (table: 4.12).
12. Significant difference was not found between the scores of boys and the scores of girls on Educational outcome with respect to Reasoning (table: 4.12).

5.2.1 Findings from Student's Emotional Intelligence Scale

The researcher had derived the following findings from the results.

1. Significant difference was found between the pre-test of experimental group and the post-test of experimental group on sub-skill of Emotional Intelligence (Intrapersonal) (table: 4.14). The Mean score (15.5333) is high for the post-test of experimental group (table: 4.13).
2. Significant difference was found between the pre-test of experimental group and the post-test of experimental group on sub-skill of Emotional Intelligence (Interpersonal) (table: 4.14). The Mean score (45.0333) is high for the post-test of experimental group (table: 4.13).
3. Significant difference was found between the pre-test of experimental group and the post-test of experimental group on sub-skill of Emotional Intelligence (Stress Management) (table: 4.14). The Mean score (36.6000) is high for the post-test of experimental group (table: 4.13).

4. Significant difference was found between the pre-test of experimental group and the post-test of experimental group on sub-skill of Emotional Intelligence (Adaptability) (table: 4.14). The Mean score (37.2333) is high for the post-test of experimental group (table: 4.13).
5. Significant difference was found between the pre-test of experimental group and the post-test of experimental group on sub-skill of Emotional Intelligence (General Mood) (table: 4.14). The Mean score (51.2000) is high for the post-test of experimental group (table: 4.13).
6. Significant difference was found between the pre-test of experimental group and the post-test of experimental group on sub-skill of Emotional Intelligence (Positive Impression) (table: 4.14). The Mean score (18.5667) is high for the post-test of experimental group (table: 4.13).
7. Significant difference was found between the pre-test of experimental group and the post-test of experimental group on total scores of Emotional Intelligence) (table: 4.14). The Mean score (204.1667) is high for the post-test of experimental group (table: 4.13).
8. Significant difference was found between the experimental group and the control group on sub-skill of Emotional Intelligence (Intrapersonal) (table: 4.16). The Mean score (15.5333) is high for the experimental group (table: 4.15).
9. Significant difference was found between the experimental group and the control group on sub-skill of Emotional Intelligence (Interpersonal) (table: 4.16). The Mean score (45.0333) is high for the experimental group (table: 4.15).
10. Significant difference was found between the experimental group and the control group on sub-skill of Emotional Intelligence (Stress Management) (table: 4.16). The Mean score (36.6000) is high for the experimental group (table: 4.15).

11. Significant difference was found between the experimental group and the control group on sub-skill of Emotional Intelligence (Adaptability) (table: 4.16). The Mean score (37.2333) is high for the experimental group (table: 4.15).
12. Significant difference was found between the experimental group and the control group on sub-skill of Emotional Intelligence (General Mood) (table: 4.16). The Mean score (51.2000) is high for the experimental group (4.15).
13. Significant difference was found between the experimental group and the control group on sub-skill of Emotional Intelligence (Positive Impression) (table: 4.16). The Mean score (18.5667) is high for the experimental group (4.15).
14. Significant difference was found between the experimental group and the control group on total scores of Emotional Intelligence (table: 4.16). The Mean score (204.1667) is high for the experimental group (4.15).
15. Significant difference was not found between the scores of boys and the scores of girls of experimental group on sub-skill of Emotional Intelligence (Intrapersonal) (table: 4.18).
16. Significant difference was not found between the scores of boys and the scores girls of experimental group on sub-skill of Emotional Intelligence (Interpersonal) (table: 4.18).
17. Significant difference was not found between the scores of boys and the scores of girls of experimental group on sub-skill of Emotional Intelligence (Stress Management) (table: 4.18).

18. Significant difference was not found between the scores of boys and the scores of girls of experimental group on sub-skill of Emotional Intelligence (Adaptability) (table: 4.18).
19. Significant difference was not found between the scores of boys and the scores of girls of experimental group on sub-skill of Emotional Intelligence (General Mood) (table: 4.18).
20. Significant difference was not found between the scores of boys and the scores of girls of experimental group on sub-skill of Emotional Intelligence (Positive Impression) (table: 4.18).
21. Significant difference was not found between the scores of boys and the scores of girls of experimental group total scores of Emotional Intelligence) (table: 18).

5.2.3 Findings from Student's (Educational outcome and Emotional Intelligence scale)

1. There is positive correlation between Emotional Intelligence and Educational outcome of the control group (table: 4.19).
2. There is negative correlation between Emotional Intelligence and Educational outcome of the experimental group (table: 4.20).
3. There is positive correlation between Emotional Intelligence and Educational outcome of the experimental group and the control group (table: 4.21).

5.3 Main Findings

The researcher had derived the following main findings from the results.

1. Significant difference was found between the experimental group and the control group on Educational Outcome with respect to Knowing in favour of the experimental group.
2. Significant difference was found between the experimental group and the control group on Educational Outcome with respect to Applying in favour of the experimental group.
3. Significant difference was found between the experimental group and the control group on Educational Outcome with respect to Reasoning in favour of the experimental group.
4. Significant difference was found between the experimental group and the control group on total scores of Educational Outcome in favour of the experimental group.
5. Significant difference was found between the pre-test of experimental group and the post-test of experimental group on Educational Outcome with respect to (Knowing- Applying –Reasoning) in favour of post-test of experimental group.
6. Significant differences were found between the scores of boys and the scores of girls on total scores of Educational Outcome and Educational outcome with respect to Knowing in favour of boys of experimental group. But significant differences not found between the scores of boys and the scores of girls on Educational outcome with respect to (Applying – Reasoning).
7. Significant difference was found between the pre-test of experimental and the post-test of experimental on sub-skill of Emotional

Intelligence and total scores of Emotional intelligence in favour of post-test of experimental group.

8. Significant difference was found between the experimental group and the control group on sub-skill of Emotional Intelligence and total scores of Emotional intelligence in favour of experimental group.
9. Significant difference was not found between the boys and the girls of experimental group on sub-skill of Emotional Intelligence and total scores of Emotional intelligence.
10. There is positive correlation between Emotional Intelligence and Educational outcome of the control group.
11. There is negative correlation between Emotional Intelligence and Educational outcome of the experimental group.
12. There is positive correlation between Emotional Intelligence and Educational outcome of the experimental group and the control group.

5.4 Support or non-Support of hypothesis / Acceptance or rejection of hypothesis

1. Significant difference was found between the experimental group and the control group on Educational Outcome with respect to Knowing in favour of the experimental group (its acceptance).
2. Significant difference was found between the experimental group and the control group on Educational Outcome with respect to Applying in favour of the experimental group (its acceptance).
3. Significant difference was found between the experimental group and the control group on Educational Outcome with respect to Reasoning in favour of the experimental group (its acceptance).

4. Significant difference was found between the experimental group and the control group on total scores of Educational Outcome in favour of the experimental group (its acceptance).
5. Significant difference was found between the pre-test of experimental group and the post-test of experimental group on Educational Outcome with respect to (knowing- Applying –Reasoning) in favour of post-test of experimental group (its acceptance).
6. Significant differences were found between the scores of boys and the scores of girls on total scores of Educational Outcome and Educational outcome with respect to knowing in favour of boys of experimental group (its acceptance).
7. Significant differences were not found between the scores of boys and the scores of girls on Educational outcome with respect to (Applying – Reasoning) (its rejection).
8. Significant difference was found between the pre-test of experimental and the post-test of experimental on sub-skill of Emotional Intelligence and the total scores of Emotional intelligence in favour of post-test of experimental group (its acceptance).
9. Significant difference was found between the experimental group and the control group on sub-skill of Emotional Intelligence and total scores of Emotional intelligence in favour of experimental group (its acceptance).
10. Significant differences were not found between the the scores of boys and the scores of girls of experimental group on sub-skill of Emotional Intelligence and total scores of Emotional intelligence (its rejection).

11. There is positive correlation between Emotional Intelligence and Educational outcome of the control group (its acceptance).
12. There is negative correlation between Emotional Intelligence and Educational outcome of the experimental group (its rejection).
13. There is positive correlation between Emotional Intelligence and Educational outcome of the experimental group and the control group (its acceptance).

5.5 Objective – wise findings

1. To find out the impact of using some teaching methods in improving the Educational Outcome of the Basic Education Students with respect to Knowing.

Finding: The impact of using some teaching methods (Cooperative learning – Role play- Games) in improving the Educational Outcome of the experimental group of the Basic Education Students with respect to Knowing was found to be more than the control group. The Mean and S.D. of experimental group 15.3917 and 2.07996 respectively. Whereas the Mean and S.D. of control group was 12.9500 and 2.71522 respectively.

2. To find out the impact of using some teaching methods in improving Educational Outcome of the Basic Education Students with respect to Applying.

Finding: The impact of using some teaching methods (Cooperative learning – Role play- Games) in improving the Educational Outcome of the experimental group of the Basic Education Students with respect to Applying was found to be more than the control group. The Mean and S.D. of experimental group 12.1917 and 2.56693 respectively. The Mean and S.D. of control group was 9.3667 and 3.14775 respectively.

3. To find out the impact of using some teaching methods in improving the Educational Outcome of the Basic Education Students with respect to Reasoning.

Finding: The impact of using some teaching methods (Cooperative learning - Role play- Games) in improving the Educational Outcome of the experimental group of the Basic Education Students with respect to Reasoning was found to be more than the control group. The Mean and S.D. of experimental group 11.5250 and 1.96998 respectively. Whereas the Mean and S.D. of control group was 9.2083 and 2.29982 respectively.

4. To compare the test scores in cognitive domains (Knowing – Applying - Reasoning) of experimental group and control group of the Basic Education Students.

Finding: Comparison of the Mean scores in cognitive domains (Knowing – Applying - Reasoning) of the experimental group was higher than the control group. The Mean and S.D. of experimental group 39.1083 and 5.73017 respectively. Whereas the Mean and S.D. of control group was 31.5250 and 7.09430 respectively.

5. To compare the test scores in cognitive domains of the Basic Education Students of experimental group in the pre-test and the post - test.

Finding: Comparison of the Mean scores in cognitive domains (Knowing – Applying - Reasoning) of experimental group of the Basic Education Students in the post-test were higher than the pre-test, There was a great difference (table: 4.9).

6. To compare the test scores of boys and girls in cognitive domains of the Basic Education Students of experimental group.

Finding: Comparison between the Mean scores of boys and the Mean scores of girls in cognitive domains of the Basic Educationa Students of experimental group. The Mean scores of boys more than the Mean scores of girls in the total scores of the Educational outcome and knowing while both (boys and girls) Mean scores extremely equal in Applying and Reasoning (table: 4.11).

7. To compare the scores of Emotional Intelligence before the pre-test and after the post-test of experimental group.

Finding: Comparison of Emotional Intelligence the Mean scores of the post-test were higher than the Mean scores of the pre-test of experimental group (table: 13).

8. To compare the scores of Emotional Intelligence of experimental group and control group in the post - test.

Findings: In the post test of the Emotional Intelligence, the Mean scores of experimental group were higher than the Mean scores of control group (table: 15).

9. To compare the scores of boys and the Mean scores of girls on Emotional Intelligence test of experimental group.

Finding: The Mean scores of boys and the Mean scores of girls on Emotional Intelligence test of experimental group, were different slightly higher for boys than girls (table: 17).

10. To find out the correlation between Educational Outcome and Emotional Intelligence of control group.

Finding: there is a positive correlation between Educational Outcome and Emotional Intelligence of control group (table: 19).

11. To find out the correlation between Educational Outcome and Emotional Intelligence of experimental group.

Finding: There is a negative correlation between Educational Outcome and Emotional Intelligence of experimental group (table: 20).

12. To compare the correlation between Educational Outcome and Emotional Intelligence of experimental group and control group.

Finding: there is a positive correlation between Educational Outcome and Emotional Intelligence of experimental group and control group (table: 21).

5.6 Discussion (Discussion about significant) of the findings, expected/unexpected findings.

5.6.1 There would be significant differences between the experimental group and the control group on cognitive dimension (Knowing-Applying- Reasoning).

The results of descriptive statistics showed that there were significant differences between the experimental and the control groups on the dependent variables, Educational outcome with respect (Knowing – Applying - Reasoning). The results of experimental and control group showed that the Mean scores of experimental group were higher than the Mean scores of control group on Educational outcome with respect (Knowing - Applying - Reasoning). Results of t-test showed that there was a significant difference between the experimental group and the control group on Educational outcome with respect to (Knowing- Applying- Reasoning). From this result it can be expected from the findings that using some teaching methods (Cooperative learning - Role play - Games) helped for improving Educational outcome with respect (Knowing - Applying - Reasoning) of experimental group of STD VIII Basic Education School in the republic of Yemen.

From the above finding it is clear that teaching method by cooperative learning improve Educational Outcome of experimental group. This finding is supported by the earlier study by AbdulSalam D.A Saif (2015) the results reveal that the achievement level of cooperative learning group students was higher than the achievement level of the control group students. Therefore, learning together technique of cooperative learning was more effective than traditional method in biology teaching. And also study by Bilesanmi-Awoderu Jumoke Bukunola, Oludipe Daniel Idowu (2012) that confirms cooperative teaching strategies were found to be more effective in enhancing students' academic achievement and retention in basic science more than the conventional-lecture.

From the present study, the experimental group which was taught by Role-play achieved higher Educational outcome than the control group which taught by traditional method. This result is supported by Qasem Nawwaf Al-Barri, et.all (2014), the results indicated that there were statistically significant differences between the two groups in the linguistic pattern achievement test and the verbal expressive performance checklist in the favor of the experimental group

From the present study the experimental group which taught by Games achived higher Educational outcome than the control group which taught by traditional method. This result is supported by Javed Mustafa, et.all. (2011). it can be said that non-technological games can play a vital role in improving students' achievement in mathematics.

5.6.2 There would be significant differences between the scores of pre-test and the scores of post- test in cognitive dimension (Knowing – Applying – Reasoning) of experimental group.

The results of descriptive statistics showed that there were significant differences between the pre-test of experimental group and the post-test of experimental groups on the dependent variables, Educational outcome with respect (knowing – Applying- Reasoning). Result t-test showed, there was significant difference between the pre-test and the post –test of experimental group in favour of post-test of experimental group. The findings indicate that using some teaching methods (Cooperative learning - Role play - Games) have been helped for improving Educational outcome with respect (Knowing - Applying - Reasoning) of experimental group of STD VIII Basic Educational School in Republic of Yemen, the researcher was expected this findings.

Our findings indicate that teaching methods used (Cooperative learning - Role-play - Games) have an effect on cognitive demotion (knowing – applying - reasoning) in favour of the experimental group in post-test. This finding is in accordance with study by William Orora, et.all, (2014) the findings indicate that CEL enhances achievement when compared

with conventional methods. It is concluded that CEL is an effective strategy that should be incorporated in the teaching of Biology. And our finding is supported by a study conducted by Jui-Mei YIEN (2011), which explored the influence of applying a game-based learning approach to nutrition education. The result showed that the learning achievement of the students in the experimental group was significantly better than that of the students in the control group

5.6.3 There would be significant differences in scores among boys and girls in cognitive dimension (Knowing – Applying – Reasoning) of the experimental group.

The results of descriptive statistics showed that there were significant difference between the boys and the girls of experimental group on total scores of Educational outcome and knowing in favour of boys of experimental group but not significant difference between the boys and the girls of experimental group on Applying and Reasoning. The previous result indicated at the effectiveness of the teaching methods used (Cooperative learning - Role play - Games) as scores of both boys and girls have improved where they showed enthusiasm for learning, teamwork and positive interaction in educational situations (expected findings). However, boys were superior to girls in the post-test for Educational outcome and knowing, which means that the boys were more enthusiastic in teamwork and implementation of all cards (Cooperative learning- Role play - Games). All of that helped to improve their grades and their scientific attainment (unexpected findings) because the researcher was expected findings the same scores of both boys and girls to be improved on cognitive domain (Applying - Reasoning).

The findings indicate that using some teaching methods (Cooperative learning - Role play - Games) have been helped for improving Educational outcome with respect (Knowing - Applying - Reasoning) for both boys and girls, this findings can be supported with findings study by Sabiru Dahiru Yusuf (2014) which showed that students taught using Collaborative learning tent to achieve significantly higher achievement when compared

with those taught using lecture method. Based on the findings, the recommendations were made, among which; Chemistry teachers should always use Collaborative learning in teaching chemistry concepts, as this method enhance students achievement.

5.6.4 There would be significant differences between the pre- test and the post-test scores of experimental group on Emotional Intelligence Scale.

Result showed significant difference between the pre-test and the post-test scores of experimental group on Emotional Intelligence scale. Results of this study showed that effective teaching methods (Cooperative learning - Role play- Games) played a pivotal role to increasing Emotional Intelligence and all sub-skills of experimental group, before and after the use of teaching methods are different. So, that teaching methods (Cooperative learning - Role play - Games) effect in improving scores on Emotional Intelligence of experimental group, this expected findings.

Our findings are in consonance with the study conducted by Aghdas Safari, et.all. (2013), who investigated in increasing Emotional Intelligence by effective communication skill training among female university students, result of this study that ANCOVA analysis results among the experimental group showed that the training program was effective in raising the level of Emotional Intelligence significantly.

5.6.5 There would be significant difference between the experimental group and the control group on Emotional Intelligence in post-test scores.

Result showed significant differences between the experimental group and the control group on Emotional Intelligence scale in favour of experimental group. Results to demonstrate a statistically significant improvement in Emotional Intelligence and sub-skills (Intrapersonal, Interpersonal, Adaptability, General mood, Stress management and Positive Impression) were analyzed for improvement in favour of experimental group, this expected findings because in this study has been used some

teaching methods (Cooperative learning - Role play - Games), that teaching methods were helped to improve of Emotional Intelligence for experimental group, but the control group have been used with traditional methods were not helped to improve Emotional Intelligence.

Our findings can be supported with reference to an exploratory study conducted by Leila Riahi Farsani, et. al, (2013), that was to investigate the effect of Emotional Intelligence education on mental skills in athlete's teenagers, found that, experimental group obtained the higher Emotional Intelligence and mental skills scores rather than control group.

The result of this study is in line with those conducted by Monir Kalantar Goreysh, et, all. (2013), explored the effect of Combined Mastery-Cooperative Learning on Emotional Intelligence, Self-esteem and Academic Achievement in Grade Skipping, and their result showed a significant increase in Emotional Intelligence and self-esteem, similar to our findings.

Malek Turki Jdaitawi (2012), who examined the effect of emotional intelligence training on social and academic adjustment among first year Jordanian university students. Result found that the training was significantly effective in improving the Emotional Intelligence.

Ilkay Ulutas, and Esra Ömerog˘lu (2007): showed that an Emotional Intelligence education program contributed significantly to children's emotional intelligence levels and Nori labinti Md Salleh, Ikhsan bin Othman (2014), results showed that the experimental group received teaching instruction which integrates Emotional Intelligence has statistically significant effects on students' attitudes toward Mathematics, Also showed that the integration of emotional intelligence in teaching and learning process has significantly increased students' attitudes toward Mathematics.

5.6.6 There would be significant differences between the scores of boys and the scores of girls of experimental group on Emotional Intelligence Scale

There is no significant difference between the scores of boys and girls of experimental group on Emotional Intelligence Scale, The result indicates that, the effectiveness of the teaching methods (Cooperative learning - Role play - Games) in the development of the skills of Emotional Intelligence (Intrapersonal, Interpersonal, Stress management, Adaptability, General mood and Positive impression) among both boys and girls. The scores of both boys and girls have improved without the presence of significant differences, which proves that there is an equal potential willingness at both boy and girl to develop all the skills of emotional intelligence (this expected findings). They were also able to face the difficulties and to cope with difficult conditions, Hence students should be able to recognize their abilities and capacities instead of feeling low and develop ability to work and study in adverse emotional conditions of life.

Our findings can be supported with reference to an exploratory study conducted by Koh Bee Hong (1999), was looked into the relationship between emotional intelligence and academic achievement among the form four students in the Kulim/Bandar Baharu District, and found that there was no significant difference in the mean Emotional Intelligence score according to gender.

Farah Malik, Sultan Shujja (2013), explored relationship of emotional intelligence with academic achievement in children of 4 to 8th grades with age 9 through 13 years, and pointed out that gender differences were found in both groups for total EQ, different to our findings.

5.6.7 There would be a significant difference correlation between the Educational outcome and the Emotional Intelligence of control group.

There was significant correlation between Educational outcome and Emotional Intelligence of control group, this indicates that the lower

Emotional Intelligence would lead to a lower level of educational outcome or that the higher emotional intelligence would lead to a higher level of Educational outcome.

Our findings are in consonance with the study conducted by Dehhiri GH.R, (2006), investigated the relationship between Emotional Intelligence and academic achievement. And found among Emotional Intelligence components, flexibility, independent and empathy have significant role in academic achievement prediction.

A study conducted by Banafshe Hasanvand, Mohammad khaledian, (2012), examine the relationship of the Emotional Intelligence with the self-esteem and the academic achievement in the BA (bachelor of art) students, and their result showed there is a meaningful positive relationship between the exciting intelligence, general self-esteem, social esteem, public esteem, educational self-esteem and the academic achievement.

T. HasanTehrani,et.all, (2008), determined the relationship between Emotional Intelligence, mental health and academic achievement among nursing students, and found There was seen a significant relationship between Emotional Intelligence, and academic achievement ($P < 0.001$).

5.6.8 There would be a significant correlation between the Educational outcome and the Emotional Intelligence of experimental group.

There was no significant difference between Educational outcome and Emotional Intelligence of experimental group.

Poonam Mishra (2012) in his study related with the present study showed the significant negative correlation between Emotional Intelligence and academic achievement of senior secondary boy students studying in Government schools of Jaipur district.

Our findings can be supported with reference to an exploratory study conducted by Hossein Jenaabadi (2014), which aimed to study the relation

between Emotional Intelligence and self-esteem with academic achievement, statistically significant negative relationship between Emotional Intelligence and academic achievement.

A study conducted by Fatemeh Hosein doostgashoogchi, Solmazsaeidihagh (2013) examined the relationship between Emotional Intelligence and academic achievement of boys and girls in Tabriz high school students, and found that there was no significant difference in the total score of Emotional Intelligence and academic achievement .

A similar research present study by Chinmay J. Shah,et.all (2014), The aim of this study was to see whether there is a relationship between Emotional Intelligence and academic success, examined that there is a relationship between Emotional Intelligence and academic success, and found inverse relationship between Emotional Intelligence and academic achievement.

5.6.9 There would be a significant correlation between the Educational outcome and the Emotional Intelligence of experimental group and control group.

There was significant correlation between Educational outcome and Emotional Intelligence of both the experimental and control group.

A study conducted by Smritikana Mitra Ghosh (2014), the findings of the study reveal positive relationship between Emotional Intelligence and academic achievement.

A similar research present study by Tripti Singh (2014), they found that there is a significant relationship between Emotional Intelligence and Academic Achievement.

Our findings also supported by Mohammad Khaledian (2013), his study showed there was a meaningful positive correlation between their EQ and academic achievement.

5.7 Recommendations

5.7.1 Recommendations for Student

1. Student must identify and recognize their own abilities and capacities and develop their potentials even in adverse emotional conditions of life.
2. Students should learn the essentials of handling anger, managing conflicts, developing empathy, and controlling impulses.
3. Students must learn how to recognize their own feelings. Ask yourself how you feel and be honest, you have the right to any feelings and should not be ashamed of them.
4. Students should take responsibility for their feelings. Having recognized them, try to understand why you are feeling that way, what it was that made you so happy, or angry, or that hurt you.
5. Students should ask others how they are feeling since one cannot know that unless we ask, one should ask oneself if sometimes he/she looked angry, while in reality you felt hurt or worried. Student should Listen to other people carefully, without judgments and ask oneself if he/she would like to be listened to that way.
6. Students should try to be less sensitive, if someone tells us something we disagree with, we should not immediately withdraw or attack because such reactions only show that we cannot cope with criticism and can affect our certainty and self-confidence as well as the image others have about oneself.
7. The development of interpersonal skills should focus on positive interpersonal environments, conflict management, appreciating, tolerating and accepting individual differences, multiple perspectives and problem solving Development of intrapersonal skills should

involve programs focusing on self-esteem, goal-setting, thinking skills, emotional expression, self-expression, self-acceptance and self-directed learning.

8. Student should increase the students' participation in the educational process through collective activities to create and strengthen educational and social relationships between them and develop students' emotional intelligence.
9. Students should manage emotions, use emotions to motivate, develop interest, recognize the emotions of other people, manage relationship, set and achieve personal goals and develop their potentials, to be realistically positive and optimistic.
10. Students should actively pursue student affairs and group activities.
11. Students should increase the interaction between fellow students and reinforce communication abilities to improve relationships.

5.7.2 Recommendations for Teacher

1. Teacher can use teaching methods of (Cooperative learning - Role play- Games) in the teaching of sciences subject which has positive impact on the development of educational outcome and emotional intelligence among students. Other subjects study based on the above methods can also used to enhance emotional intelligence.
2. Students must be encouraged to work in groups in the classroom to develop the skills of emotional intelligence and cooperative learning.
3. An opportunity must be provide for students to discuss and express their feelings, their own ideas and the findings they have reached during the course of the teamwork.

4. The teachers should be competent to identify the changing emotional classroom environment and have the ability to empathize, encourage and connect with students on emotional level.
5. An emotionally healthy environment can promote emotional health of students. It is high time that policymakers, teachers got oriented towards the importance of Emotional Intelligence. They are the personnel who decide the rules, regulations and environment of the school.
6. This study would be very useful in an educational setting in terms of gauging student's emotional quotient and give some interventions immediately to enhance their quality of life and psychological well-being.
7. Teachers should teach students social skills in settings where the skills will be used. If teaching social skills in the natural setting is not possible, we can use role playing to reflect a variety of settings or teach children to self-monitor their use of skills across settings.
8. Teachers must help children to recognize and manage their emotions, respectful interactions with students.
9. Teachers should offer guidance and instructional programs which encourage students to express their negative emotions before labelling them with any negative characteristics.
10. Balanced combination of emotional mind and cognitive mind in teaching primary school students will facilitate the identification, recognition and development of their emotional skills which can in turn contribute to their personal, academic success.

11. There should be no suppression of emotions, They should be improved Emotional Intelligence and Educational outcome through constructive activities, games, dramatics, cooperative learning, and other.
12. Important that teachers acquaint themselves with the skills of emotional competencies to handle the children at various age groups, carefully.
13. Management and emotional consulting abilities to reduce the adverse effects of students' emotional disorders and bad adaptation.

5.7.3 Recommendations for parent

1. Promote appropriate parenting, improve adolescents' emotional intelligence, and encourage constructive friend and social activities.
2. Entertaining trainings, video programs and books, parents can learn skills to guide their children at every age.
3. All parents need to encourage independence and autonomy in their children while providing the security, warmth, and closeness to nurture their optimal emotional development.
4. Attend some programs supporting emotional intelligence may take place in parent education.
5. Awareness among parents, educators and counselors about emotional intelligence is need of the house, some workshop or counseling can motivate positive to develop emotional intelligence in children.
6. Awareness among parents as how to handle their children which will reduce emotional disturbance and develop emotional intelligence, educational outcome among children must be done.

7. Develop positive and effective parenting styles for developing higher level of emotional intelligence and educational outcome among children.
8. Important that parents acquaint themselves with the skills of emotional competencies to handle the children at various age groups, carefully.
9. Cooperation between parents and school in making the learners to be well adjusted emotionally as this could be increasing their academic achievement.
10. Results Batool SS, Bond R (2014) indicate that emotional intelligence of parents indirectly linked to aggression among offspring, through parenting styles. Hence that emotional intelligence training will help parents to improve their parenting styles, and it will lower the risk of aggression in their children.
11. Understand and differentiate your child's emotions, assist your child in self-reflection and self-awareness, empower your children to make decisions, teach your child, not direct.
12. Can take advantage of the educational activities from internet, video in CD, TV, and other, mass media to acquire the exact concepts of emotional education and proper life adjustment capabilities.
13. Facilitating a positive family environment, increase positive interaction between parent and children to help augmenting of life-adjustment abilities.
14. Understand their child's personal character and abilities., train their children to possess multiple capabilities and interests, foster their child's learning activities.

5.7.4 Recommendations for Head of the institute

1. use of teaching methods (cooperative learning - role play- games) in the teaching of subjects have positive impact on the development of academic achievement and emotional intelligence among students.
2. There is necessity to develop the emotional competencies of the student teachers, which in turn helps them to develop the same among their students.
3. Strategic competency in teaching can be developed in students by means of emotional intelligence. The concept of emotional intelligence may be incorporated in the student education curriculum to revitalize student education program.
4. Qualitative and quantitative analyses on the emotional intelligence ability development of pre-serve teachers at all levels can be made.
5. Conduct students consulting program in institute reinforce students' abilities for emotional control.
6. Provide gender education of mutual learning to help students to learn how to deal with people.
7. Develop operational research to enhance personal emotional control and related professional knowledge to achieve higher educational effectiveness.
8. Provide parenting activities in the institutes to heighten children's emotional intelligence and promote the ability to recognize and control personal emotions.
9. Hold training workshops for teaching parenting styles to parent.

10. Use effective strategies and tools to enhance their working relationships and work productivity through effective communication, improved management of the emotional impact of working with others and improved academic achievement among students.

5.7.5 Recommendations for Government

1. Students can be trained on the skills of emotional intelligence by using difference teaching methods in the classroom.
2. The teachers teaching science subject, can be trained in pre and in service, to use teaching methods (Cooperative learning – Role play – Games) in the teaching of science subject.
3. The teachers of science subject must be trained before and during the service, to acquire the skills of emotional intelligence.
4. The content of science curriculum at the basic stage of education according to the teaching methods (Cooperative learning - Role play - Games) should include a variety of activities for all scheduled units to meet the needs of students.
5. Achievement of the objectives related to emotional intelligence development remain incomplete until our future teachers are well equipped with handling new aims/objectives of education, methods, techniques and are ready to take the responsibility which is a tactful task.
6. There should be an arrangement in school to help students who are suffering from some emotional problems. The clinical psychiatrist visits may be scheduled.
7. Government should therefore design programs that would assist students in developing interpersonal, intrapersonal and emotional intelligence, and to develop tolerance and acceptance of differences

8. Media can be used to develop the necessity of Emotional Intelligence and Educational outcome by putting up audio/video training programs on the basic tenets.
9. Curriculum experts should develop an effective instructional curriculum that incorporates emotional intelligence skills with the objective of enhancing personal and career success of students.
10. It is recommended that the Ministry of Education include some teacher training programs in order to enhance teachers' emotional intelligence for classroom discipline strategies. Such programs will assist teachers in developing better strategies for classroom discipline.
11. Revisit the curriculum for teacher's training and to include skills development for teachers to facilitate the development of emotional intelligence skills.
12. Prepare program to provide teachers with additional skills about improving emotional intelligence and educational outcome to meet the challenges of an increasingly diverse student population.
13. Promote class activities, such as outdoor education, parents' day, etc, to facilitate consultation with parents, teachers and educators.

5.8 Topics for further research

1. A study can be conducted on the impact of the teaching methods (Cooperative learning – Role playing – Games) in the development of other variables of intelligences (engineering intelligence – social intelligence – visual intelligence – linguistic intelligence etc. of multiple intelligences.
2. A study can be conducted about the use of teaching methods (Cooperative learning – Role playing – Games) in various educational stages and multiple curriculums and identify the impact in the development of educational attainment and emotional intelligence.

3. Similar studies can be conducted on a wide range of samples of students in the basic eighth class to make sure the effectiveness of teaching methods (Cooperative learning – Role play Games) in the development of educational attainment and emotional intelligence.
4. A program must be established based on teaching methods (Cooperative learning – Role play – Games) in teaching the subject of science to determine the impact of the program on the development of educational attainment and emotional intelligence.
5. Study of the relationship between Emotional Intelligence and other variables such as social intelligence – creative thinking – critical thinking can be carried out.
6. It is suggested to the educational institution Heads, teaching schools and others to develop the positive emotional skills among the students in the form of creating an approach towards science subject:
 - Teaching students to recognize their own emotions and how they affect their thoughts and behaviour, know their strengths and weaknesses, and have self-confidence.
 - The students can be taught to control their impulsive feelings and behaviours, to manage their emotions in healthy ways, they can be motivated to take initiative, follow through commitments, and adapt to changing circumstances.
 - Understanding others feeling, the stakeholders have to educate the students to understand the emotions, needs, and concerns of other people, pick up on emotional cues, feel comfortable socially, and recognize the power dynamics in a group or organization.

- Teaching the students to educate to develop understanding – how to develop and maintain good relationships, communicate clearly, inspire and influence others, work well in a team, and manage conflict.
7. Contract some courses in different levels of schooling system for the students to improve the EI level of the students and academic achievement.
 8. Future studies can examine the impact of using some teaching methods (Cooperative learning - Role play - Games) in improving emotional intelligence and educational outcome within the framework of secondary school.
 9. Further that resembles research on student in junior school and junior high school and other university students.
 10. Further research also needs to be conducted to see if a link does exist between students' emotional intelligence and increasing student achievement.
 11. The experimental study focused exclusively on STD VIII Basic Education School in Hajjah-Yemen, thus there is a need future study to be directed toward other sections, schools, cities. Hence application of this research should take different places.
 12. Future studies are recommended to use bigger sample sizes and consider the using new methods for teaching of experimental group.
 13. Future studies should apply (Cooperative learning - Role play - Games) with more participants to generate more evidence on the effects of (Cooperative learning - Role play – Games).

5.9 Epilogue

The results of descriptive statistics showed that there were significant differences between the experimental group and the control groups on the dependent variables, Emotional Intelligence, and Educational outcome. The results of experimental group and control group showed that the experimental group had higher Emotional Intelligence, and Educational outcome than the control group. Results of t-test showed that there was a significant difference between the experimental group and the control group on Emotional intelligence, and significant difference between the experimental and the control group on Educational outcome with respect to (Knowing - Applying -Reasoning).

Furthermore, result t-test showed there was significant difference between the pre-test and the post –test of experimental group on Emotional Intelligence and Educational outcome, and also significant difference between the boys and the girls of experimental group on total scores of Educational outcome and knowledge for boys, but not significant difference between the boys and the girls of experimental group on Applying and Reasoning, and result showed that there was no significant difference between the boys and the girls on Emotional Intelligence variable.

Finally, there was significant correlation between Educational outcome and Emotional Intelligence of control group, but not significant differences between Educational outcome and Emotional Intelligence of experimental group, and there was significant difference between Educational outcome and Emotional Intelligence of experimental group and control group. Therefore, one of contribution of this study it indication of the significant differences between the experimental group and the control group on Emotional Intelligence and Educational outcome variables, as well as STD VIII students have increases their scores on Educational outcome and Emotional Intelligence after they used teaching methods (Cooperative learning – Role play- Games).