



ORIGINAL RESEARCH PAPER

Education

A STUDY ON EMOTIONAL INTELLIGENCE IN RELATION TO ACHIEVEMENT IN CHEMISTRY AMONG HIGHER SECONDARY STUDENTS

KEY WORDS: Emotional intelligence and achievement

Dr . S. Kalaivani

Assistant Professor, Department Of Education, Annamalai University, Annamalai Nagar.

ABSTRACT

The present study aims to know the higher secondary school students' emotional intelligence in relation to achievement in chemistry. Simple random sampling technique has been used in the selection of the various schools in Cuddalore District. In the present investigation a sample of 565 higher secondary students were selected from these schools in Cuddalore District. To measure emotional intelligence Nicola S. Schutte (1990) scale was used. For achievement score student final exam mark was considered. Result shows that there is a positive and significant correlation between emotional intelligence and achievement in chemistry.

INTRODUCTION

Man is born with some innate, emotions, intelligence and also emotional intelligence. Our emotions play a quite significant role in guiding and directing our behaviour. Intelligence, as the ability to make adoption, has a significant correlation with emotional adjustment. Emotional intelligence is the capacity to reason with emotions, to perceive emotion, to integrate it in through, to understand it and manage it. All men are born with some innate emotional intelligence potential in terms of one's level of emotional sensitivity, emotional memory, emotional processing and emotional learning ability. This potential is liable to be developed or damaged as a result of one's life experiences. Emotions are pleasant as well as unpleasant. Unpleasant emotions like fear, anger, jealousy which are harmful to an individual's development are termed as negative emotions while pleasant emotions like affection (love), amusement, curiosity, joy and happiness which are very help and essential in the normal development of an individual are termed as positive emotions.

By their nature of positiveness and negativeness, it should not be assumed that all the positive emotions are always good and the negative emotions are bad. While weighing their impact, other factors like the frequency and intensity, situations and the nature of stimulus should also be considered.

Emotional Intelligence is the aggregate of abilities, competencies and skills that represent a collection of knowledge used to cope with life effectively. Thus it is as closely related to the personal and professional growth of an individual more so when individuals have to take decisions under stressful and difficulty situations.

Daniel Goleman, one of the early proponents of emotional intelligence, has defined Emotional Intelligence as follows: "Emotional Intelligence refers to emotional awareness and management skills which provide the ability to balance emotion and reason so as to maximize long-term happiness".

Emotional Intelligence tries to keep the level of the emotions like Anger, Sadness, Fear, Enjoyment, Love, Surprise, Disgust, Shame etc at manageable level.

To conclude, we would like to quote Daniel Goleman himself, "Emotional Intelligence is a master aptitude a capacity that profoundly affects all other abilities either facilitating or interfering with them."

Therefore developing the Emotional Intelligence of students ends in the development of the Society and thereby improvement or development of the country occurs.

Emotional Intelligence can be defined as the abilities concerning the recognition and regulation of emotions in the self and others. It is all about effectively and rightly understanding the emotion of oneself and others. Very often it is viewed as a tool for achieving success in personal as well as in professional life. As widely acknowledged, 'EI gives you a competitive edge having great

intellectual may make you a superb fiscal analyst or legal scholar, but a highly developed EI will make you a candidate for CEO or a brilliant trial lawyer". EI accounts for 80-90% of the success of organizational leaders.

Emotional Intelligence (EI) determines our potential for learning practical skills based on self-awareness, motivation, self-relation, empathy and adaptiveness in relationships. Our Emotional Competence (EC) shows how much of potential we have translated into on-the-job capabilities. This article talks about EI and EC and throws light on ways to improve them both on individuals and group levels in organizations.

OBJECTIVE

- To find out the relationship between emotional intelligence and achievement in chemistry of higher secondary students.

HYPOTHESIS

Based on the objective the hypothesis is formulated

- There is a positive and significant correlation between emotional intelligence and achievement in chemistry.

METHODOLOGY

Methodology is an important aspect in any kind of research work. Every research study has its own objectives. The procedure adopted by the research works for the realization of these objectives is known as Methodology. "Methodology is the science of methods or principles of procedure" (Good, 1945, p.259). The methodology adopted enables the investigator to look at the amorphous data in a meaningful way. There are variety of methods and procedures employed by which the research workers gather facts for their study.

Sample

A sample of 783 higher secondary students appears to be adequate to give representation to parents with different levels. When the tool was given some of them could not respond, some tools collected back were either incomplete or damaged. So such cases were removed and in the final analysis only 565 responses are considered for analysis.

SAMPLING TECHNIQUE

Simple random sampling technique has been used in the selection of the various schools in Cuddalore District. In the present investigation a sample of 565 higher secondary students was selected from these schools in Cuddalore District.

TOOL USED

The emotional intelligence scale which was developed by Nicola S. Schutte (1990) was applied in the present study. The emotional intelligence scale consists of 33 statements which follows five response categories viz., strongly disagree, disagree, undecided, agree and strongly agree.

Administration

The emotional intelligence scale is constructed with simple

sentences, which can be easily understood. It is a paper-pencil test. Normally people require 10-20 minutes to complete this scale, depending on the subjects. Before starting the test the following set of instructions were given. "Here is a set of statements which follows five response categories. Please read them carefully and indicate your agreement or disagreement on the five point rating scale. If you strongly disagree with the statement mark "1", if you disagree mark "2", so forth. Take your time to read each statement and answer it, but it usually takes 10-20 minutes to complete this scale. Please answer all the items. Doubts, if any may be clarified with me. The results of the tests will be kept confidential, so please give your true answers".

Scoring

Items on the entire scale were divided as positive and negative items. Items 5, 28 & 33 are negative items and the 4 remaining are the positive items. Negative items were reverse scored. The scores given by the subject were added (both positive & negative items) to find out their emotional intelligence.

	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
Direct scores	1	2	3	4	5
Reverse scores	5	4	3	2	1

Reliability and Validity

The Reliability Of the tool was established by the test-Retest method. The co-efficient of correlation was found to be 0.78. The split-half reliability of the was calculated and was found to be 0.71. This suggests that the correlation value is significant at 0.01 level. Therefore, it is concluded that the Emotional Intelligence Scale used in this study is highly reliable.

The Validity of the scale was established through cross-validation procedure with the Emotional Intelligence scale by Bar-On. The correlation co-efficient was found to be 0.73 and hence the scale is highly valid.

RESULTS AND DISCUSSION

Table 1: Showing correlation between students emotional intelligence and achievement in chemistry

Variable	Achievement in chemistry
Emotional intelligence	0.392**

** Significant at the 0.01 level

Hypothesis:

There is a positive and significant correlation between emotional intelligence and achievement in chemistry.

The above table shows significant correlation between students emotional intelligence and achievement in chemistry. Result shows that there is a positive and significant correlation between emotional intelligence and achievement in chemistry. Hence the stated hypothesis is accepted.

DISCUSSION

The purpose of this section is compare the findings of other researches in relation to the present study.

Daniel Goleman (2002) is of the opinion that the resonant leaders excel not just through industry say but also by leveraging EI competencies. Betty Nina (2002) has stated that mental alertness and emotional stability helps the executives at the time of selecting leadership styles in a particular stimulation.

From the findings of Goleman et al, (2002) it is hypothesized that leaders who have strong self-management skills are able to control their own disruptive emotional and impulses, display honesty and integrity and to be adaptable and flexible in situations that call for change. They are drivers to improve their performance in order to meet on inner standard of excellence, ready to raise opportunities and are able to see the positive side of difficult situations.

Vorbach, et al (2003) studied on the relationship between emotional competence and social competence in early

adolescence. 114 adolescents of 12 to 15 years of age are taken. The Adolescent Multifactor Emotional Intelligence Scale (AMESIS) was used to assess emotional skills and knowledge findings indicated that the ability to identify other's emotions could be measured in a relatively straight forward and highly reliable way, but that the AMESIS demonstrated mixed effectiveness.

On the whole, many studies support the consistent positive relationship between emotional intelligence and academic achievement.

CONCLUSIONS

The study aimed to know the higher secondary students emotional intelligence in relation to achievement in chemistry. The researcher framed objectives and hypothesis on the basis of the above context. The research was carried out in 565 samples based randomly. Standardized questionnaire was used to collect the relevant data. After collecting the data they were analyzed using correlation analysis. Result shows that there is a positive and significant correlation between emotional intelligence and achievement in chemistry.

REFERENCES

1. Bayely and Oden (1955). "Comparison of Academic Achievement of School Boys and Girls". Journal Educational Research, 9: 13-15.
2. Beety A.Collis, Richard. L. Williams (1987) "A study of adolescents achievement towards selected schools subjects", Unpublished Doctoral Thesis, University of Victoria.
3. Caruso et al. (2002) – "Emotional Intelligence–Indian Hues" – Cover Story. P-20.
4. Chouban and Tithio (2002) "Emotional Intelligence scale". Journal of Educational Psychology Vol.58 No.2-3.
5. Daniel Goleman (2002) "Social Intelligence –The New Science of Human Relationships", Journal on Self-development, p-53, Volume- III.
6. Vorbach, et al (2003) "A study on relationship between emotional competence and social competence in early adolescence". Ph.D. Thesis Spalding University.