CONSTRUCTION OF A SCALE OF EMOTIONAL INTELLIGENCE

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ABSTRACT

The growing interest in emotional intelligence has encouraged researchers to devise scales on emotional intelligence. The developed countries have taken lead and U.S. psychologists have prepared tool for measuring EQ of various professionals. It has attracted the attention of researchers in India and also the scales for EQ measurement have been prepared. However, as these scales are standardized on Indian managers, businessmen, bureaucrats and industrial workers, these are not suitable for measuring EQ of students pursuing different professional courses. Details are presented about the psychological nature of the scale, item selection try out, scoring and item analysis. Different procedures followed for estimating reliability and validity of this scale are presented.

INTRODUCTION

Emotions play a very important role in motivation of behaviour and are an integral and significant aspect of human nature. They are the currents of energy that are within us. These activate our lives, shape our perceptions and behavior, which then emanate outwards and influence others.

Emotions have direct and indirect effect on personality. The direct effects come from physical and mental disturbances, while the indirect effect come from reactions of members of the social group toward a person who is experiencing the emotion. A few traditional terms associated with emotion are love, hate, fear, happiness, surprise, anger, determination, disgust and contempt.

Another factor, which determines individual's success is intelligence. In a sense we have two brains, two minds and two different kinds of intelligence : rational and emotional, indeed, intellect cannot work at its best without emotional intelligence.

In the late 1980s, two American psychologist, Peter Salovey of Yale and John Mayer of the university of New Hampshire, summed up the qualities such as empathy, self-awareness and emotional control under emotional intelligence. Then, Daniel Goleman (1995) of the New York Times, adopted it and introduced it in best seller "Emotional Intelligence why it can matter more than IQ". According to Goleman, IQ accounts for only about 20% of a person's success in life. The balance can be attributed to "emotional intelligence" or EQ.
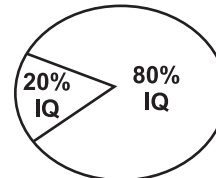
Dimensions of Emotional Intelligence

John Mayer and Peter Salovey had coined the term emotional intelligence in 1990. They conceived emotional intelligence as multi-dimensional.

1. Self Awareness : - is the emotional skill involves being able to recognize feeling and put a name to them.

2. Self-Motivation: - Means managing ones internal state, impulses and resources.

3. Self Motivation: - includes achievement drive, commitment to the goal.

4. Empathy: - means awareness of others feelings, needs and concerns and taking active interest in others concerns.

5. Social Skills: - is the ability to induce desirable responses in others.

The details about the development of scale are presented in the following sections: -

Item Preparation: -

The review of literature on emotional

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intelligence illustrates that emotional intelligence is multidimensional. Hence, by consulting books on emotional intelligence and the dimensions identified by the previous researchers the dimensions of the present study were determined.

Initially seventy five items were prepared for the tool. Number of items pertaining to each dimension were fifteen. Each item was critically analyzed by a panel of five experts. The items were checked for content and face validity. The diction, phrasing, format, response categories and relevance of each item was analyzed. Items which appeared to be overlapping were clubbed together. Some new statements suggested by experts were added. Finally, a tool of seventy two items was prepared.

PRE TRY OUT

This tool was administered on a sample of sixty students pursuing various professional courses. They were asked to put a tick mark, on a five point scale, to the item which best suited to them. The frequency distribution of responses for each item was dropped and those items which received maximum responses (i.e. strongly agree or strongly disagree) were dropped. Similarly some more items were also dropped due to language ambiguity and language difficulty.

Thus after pre try out, sixty six items were retained. Out of these thirteen items belonged to each dimensions of self awareness, self regulation, self motivation and empathy except the dimension of social skills which has fourteen items.

TRY OUT

The emotional intelligence scale consisting of sixty six items was again administered on three hundred students of six different professional institutions.

ITEM SELECTION

Item Discrimination

After scoring the responses the "t" was calculated to ascertain whether the items can discriminate between high scorers and low scorers. This method involves calculation of 't' values for the differences between the means of high (upper 27% students on the basis of total scores) and low (lower 27% students on the basis of total scores) groups for each item. For this purpose the total scores obtained by all the candidates were arranged in descending order and the scores of top twenty seven present and bottom twenty seven percent were selected for calculation of "t". The performance of upper group was compared with lower group, 0.01 level of significance was fixed as a criterion for retaining the items.

ITEM VALIDITY

The item total correlation for the remaining sixty one items was computed for the total scores of three hundred students to assess the item validity. Since all the items were found significant at 0.01 level and their coefficient of correlation was 0.115 and above all the items were selected for the study. Thus, finally a scale of sixty one items was prepared.

VALIDITY OF THE SCALE

In the selection of the best items for the scale it is desirable to have some external criteria against which to validate them. Since it was not possible to use an adequate criterion for item validation, consequently, the internal measure of total scores was used as the criterion. However, face validity has also been used in the preparation of preliminary draft. The method of item validation has been explained below:

FACE VALIDITY

This type of validity was demonstrated by 100% agreement among five Judges from the Department of Psychology, Lucknow University regarding the relevance of the items and the content being measured by the scale.

CRITERION VALIDITY (METHOD OF INTERNAL CONSISTENCY)

The scale was validated by the method of internal

consistency, where the criterion was none other than the total scores of the scale itself. It was done in two ways:

1) Correlation of each item with the total score :

In this a set of scores obtained by the candidates on each item was compared with the set of total scores of all the items. If the examinees, who did well on the total scale also did well on the item and if they did poorly on the total scale also did poorly on the item, the validity of the item is assumed to have been established.

Product moment correlation of each item with the total scores was computed with the help of a computer. The significance of product moment correlation at 0.01 level was fixed as a criterion for retaining an item.

2) Correlation of Sub-Test scores with total scores:-

In this method of criterion of internal consistency involved the correlation of the scores of different dimensions with the total scores. The scale has five dimensions (self awareness, self regulation, self motivation, social skills and empathy) whose scores were combined in finding the total scores of the scales. Then the scores of each dimension were correlated with the total scores. The significance of product moment correlation at 0.01 level was fixed as a criterion for retaining the items. Since the correlation between the scores of each dimension and the scores of total test was very high i.e. significant at 0.01 was fixed as a criterion for retaining the items.

RELIABILITY OF THE SCALE

The final version of the scale with the items arranged in random order was administered on three hundred students undergoing professional courses. Split half reliability was calculated. The test was divided into two equal parts by the odd-even method. In this method all odd numbered items (like 1, 3, 5, 7, 9 etc) constitute one part of the test and even numbered items (like 2, 4, 6, 8, 10 etc.) constitute another part of the test. Each examinee, thus receives two scores. The number of the correct answer on all odd numbered items constitutes one score and the number of correct answer on all even numbered items constitutes another score for the same examinee.

The reliability by the Rulon formula came out to be $rtt = 0.719$ for the total items and the reliability by the Flanagan formula came out to be $rtt = 0.721$ for the total items. Thus, the Rulon formula and the Flanagan formula have yielded the same coefficient of reliability from the data which automatically checks the accuracy of the computation.

TREATMENT OF DATA

For the data collected the mean and standard deviation were calculated from the computer.

The 't' values were calculated manually. Level of significance $p<0.01$ level was fixed as a criteria for retaining an item.

Product moment correlation at 0.01 level was fixed as a criterion for selecting an item.

EMOTIONAL INTELLIGENCE SCALE
DIRECTIONS

All the items are rated on a 5 point scale ranging from strongly agree (1) to strongly disagree (5) and their scores summated for each factor/dimension.

1. Strongly agree   2.Agree
3. Undecided   4. Disagree
5. Strongly disagree

1. I am fully aware of my anger and its consequences.
2. I would hide my joy and happiness of my appointment from the person who got rejected for the same.
3. When at initial stage if I do not succeed in work, I quit it.
4. I am very popular in my group and no decision is taken in my absence.
5. I am very sensitive and responsive to the feelings of others,
6. I know that I love my friends and colleagues.

7. Instead of doing something to ward off my depression I allow it to do with time.

8. When feeling depressed I think of my past achievements and feel enthusiastic and become confident.

9. I am not able to communicate my thoughts freely and publicly.

10. I recognize when others are distressed.

11. It's difficult for me to say whether I am afraid of the persons in authority.

12. I hardly find time for updating myself and practicing my ideas.

13. I recoup quickly after a setback.

14. I do not listen to the suggestions of my friends/ colleagues.

15. I politely point out to my friend for his/ her awkward behavior.

16. I am sure that I enjoy the company of my friends and relatives.

17. I do not have enough check on my emotions and sometimes they spoil my relations with others.

18. I agree that productive self-criticism is the key to self-motivation.

19. Due to my friendly nature I am liked by the whole group/ class.

20. I criticize others in public.

21. When I feel guilty and condemn I am able to know why I am doing so.

22. People trust me because I am fair, honest just patient in dealing with them.

23. I motivate others for their better performance.

24. I am not sure whether I am comfortable in expressing my feeling of love to the opposite sex.

25. I handle my depression by listening to music, reading jokes or funniest corner of the newspaper.

26. I am persistent in my efforts even in the face of failure and frustration.

27. I am not considerable with my friends and family members.

28. I take active interest in others work.

29. I am not able to recognize my anger.

30. I find difficult to deal with impulsive people.

31. I provide motivational support to peers and family members as needed to make stronger relationships.

32. I do not like to share my belongings/ things with my friends.

33. I am able to build trust with others.

34. I don't know whether I am liked by my friends and relatives.

35. I am able to take care of my family members/ colleagues/ subordinates and constantly encourage them.

36. I do not reassess my goals to set new ones.

37. I do not like teachers who are biased because I believe in democratic dealing.

38. I find it easy to assess other persons emotional state.

39. When anxious or depressed I purposely engage myself in some physical and constructive tasks such as cleaning my desk, dusting or copying notes etc.

40. I like to put motivating objects in my work place.

41. I don't believe in quick intimate conversation with others.

42. I am not concerned in advising and supporting others.

43. I am able to recognize my nervousness.

44. I generally extend help to others in need without anything in return.

45. I don't know whether I become sad or take things lightly when hurt.

46. In a seminar or other such gathering, I do not hide my confidence from the person who is nervous or shaky.

47. I am not able to increase/ enhance my energy level when engaged in some uninteresting work.

48. I am not able to help others manage their emotions.

49. I acknowledge others work and redirect them.

50. I feel happy when others appreciate my hard work.

51. I am able to calm down myself easily when angry.

52. I feel more concerned about the reward than work itself.
53. I am unable to negotiate and resolve disagreements between people.
54. I find it difficult to assess the emotional climate of a group.
55. I can discriminate between my feelings of fear and sorrow.
56. I am not comfortable in the use of new technological devices.
57. Any setback makes me more depressed and de-motivated.
58. I prefer to work in a group rather than alone and share ideas be confined to myself.
59. I do not have the patience to listen to other people woes.
60. People often confide in me because of the deep concern I have for others.
61. I can not discriminate between my feelings of anger and hatred.

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