A Full Circle Appraisal on Emotional Intelligence

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Abstract This study is about the construction of the Emotional Intelligence 360⁰ Tool. The method is a normative method with survey technique. Daniel Goleman's dimensions were used to construct the items. The sample is selected from students of higher secondary schools. Four subscales such as self-view, teacher view, peer view, and parent view make up Ei360⁰ Tool. Reliability, validity was measured, norms of the tool were established, and the scoring procedure was given.

Keywords: emotional intelligence, appraisal, 360⁰ tool

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1. Introduction

At present, the concept of emotional intelligence is being applied in various fields like Education, Medical, Commerce, Management, Business, Industries, and so on. Emotional Intelligence is, perceiving self and others emotions, understanding them and use in our thought and action. Following are some of the definitions of emotional intelligence given by renowned psychologists. Salovey and Mayer (1999) [1] conceptualized the term emotional intelligence as the subset of social intelligence that involves the ability to monitor one's own and others feelings and emotions, discriminate among them and to use information to guide one's thinking and action.

Bar-On (1997) [2] Emotional Intelligence is an array of emotional, personal and social abilities which influence one's overall ability to cope effectively with environmental demands and pressure. Murugesan and Srinivasan (2017) [3] Emotional Intelligence is "one's ability to understand one's own and other feelings, recognizing and regulate one's personal and social competencies". Emotional intelligent is an intelligent to manage the emotions and it leads to peace and successful life. According to Goleman (1998) [4], Emotional intelligence is 80% responsible for success in life and intelligence is only 20%. Emotional intelligence is a proper and precise key for manage one's emotions.

2. Background of the Study

The past several years, it is believed that success in life or at work place depends upon the individual level of intelligence or intelligence quotient as reflected in an individual's academic achievement, examination passed,

mark obtained etc. Now, research on emotional intelligence has revealed that EQ is the most important determinant of professional and person success in life. Because, emotional intelligence is a powerful trait which helps a person build relationships, using the knowledge of different behavior types, promote a leadership capabilities, capacity to manage the emotion, ability to function in a group and solve the everyday problems. It leads the peaceful life and makes a successful life.

If a person is affected by an emotion, it is contagious. Normally, in real classroom the student's emotions affects the teacher as well as the teacher's emotions affects the students [5].

The emotional outbursts become an evil power to disturb the Peace in society. If the emotions are not managed by a person, it will affect physically and mentally. A person should know that how to manage emotions and how they affect them self and others, Murugesan and Srinivasan (2017) [6]. A person feelings cannot be observed directly by others, they can also be inferred from his/her overt behavior and verbal report of his/her introspection. To produce on emotion, a situation must be related to stimulus past experience. In recent years, emotional outburst disturbs the society largely.

Many educational institutions are trying to find out the solutions to solve the emotional problems, before solving emotional problems of students one should measure the emotional intelligence of students. There are several tools on Emotional Intelligence. These tools measures emotional intelligence from one view and hence a person's emotional intelligence from many angle is not seen. Full-fledged aspect of emotional intelligence can be said as 360⁰. Based on the review of related literature no specific tool is available in India to measure Emotional Intelligence of higher secondary school students in 360⁰. Hence there is a need to construct a 360⁰ tool to measure the Emotional Intelligence of higher secondary school students.

Table 1. Goleman's Model of Emotional Intelligence

Self Awareness	Self regulation	Motivation	Empathy	Social skills
Emotional awareness	Self control	Achievement drive	Understanding others	Influence
Accurate self-assessment	Trustworthiness	Commitment	Developing others	Communication
Self confidence	Conscientiousness	Initiative	Service orientation	Conflict management
	Adaptability	Optimism	Leveraging diversity	Leadership
	Innovation		Political awareness	Change catalyst
				Building bonds
				Collaboration and cooperation
				Team capabilities

2.1. Goleman's Emotional Intelligence Model

Goleman (1998) [4] is popularly known for his best seller emotional intelligence: 'Why it is more than IQ' and 'Working with emotional intelligence'. Table 1 depicts Goleman's five domains of emotional intelligence along with its twenty five components. For constructing the Ei 360 degree tool Goleman's competencies were used 20 competencies.

3. Need for 360⁰ Tool in EI

Generally, Most of the psychological traits are measured by giving the tool to the subject and the responses were analyzed and interpreted. The measures may be highly subjective. For reducing the subject bias, the tool might be given to the peers / relatives / boss of the subject. It may reduce the biasness in the measurement. According to Lapsinger (2009) [7] 360 degree feedback process involves collecting perceptions about a person's behavior and the impact of that behavior from the person's boss or bosses, direct reports, colleagues, fellow members of project teams, internal customers, and suppliers. Other names for 360 feedbacks are multi-rater feedback, multi-source feedback, full-circle appraisal, and group performance review.

Five reasons for using 360 degree feedback are as follows; How am I doing; it can be used as a guide for continuous improvement; it can help leaders check the validity of their self-perceptions; it ensures that leaders view themselves realistically and it encourages people to invest in the effectiveness of leaders [8].

According to Lapsinger (2009) [5], 360 degree process is a tool that supports development related to succession planning. 360 degree tool can be used to determine the development needs of an individual. According to Turkel (2008) [9], 360 degree feedback is defined as a method where by a person is provided with feedback from others such as direct reports, peers, and managers regarding their performance.

One's strength and weakness affect them and as well as others, one is in need of different kinds of feedback to be progressive in the career. Based on this concept, so the constructors have made an attempt to measure the Emotional intelligence in unbiased manner. The constructors constructed Ei360⁰ tool for measure Ei of school students in 360⁰ view. Figure 1 shows the concept of 360⁰ tool for measures Ei of school students in 360⁰ view.

Figure 1. The Concept of 360⁰ Tool

4. Operational Definition of the Keywords

The constructors has defined the key words of the study as follows

Construction

Items of the measurement are developed based on theory, research, and experience in systematic plan and procedure. In the present study, the term of construction indicates specially the construction of Ei360⁰ Tool.

4.1. Standardization

Standardization is a process of establishing validity, reliability, Norms and usability for Ei360⁰ Tool.

4.2. Emotional Intelligence

Emotional Intelligence is "One's ability to understand one's own and other feelings, recognizing and regulate one's personal and social competencies".

4.3. 360⁰ Tool

360⁰ Tool provides the view of a particular trait of a person from all possible angles such as self, parent, peers and teachers.

5. Objectives of the Study

The following are the objectives of the present study.

- To standardize the Ei360⁰ Tool for higher secondary school students.
- To establish the reliability quotients, validity quotients and Norms of constructed Ei360⁰ Tool.
- To find out the relationship among the sub- scales of Ei360⁰ Tool such as,
 - Self
 - eacher's view
 - Peer's view
 - Parent's view.

6. Method of Investigation of the Study

The constructor has selected normative method with survey method for collecting data.

6.1. Location

In research, location is an identification of the geographical area where the researcher selects the population and sample for conducting the research. The constructors have selected the sample in Thanjavur, Tamilnadu, India.

6.2. Population

For fulfilling the objectives of the study, the tool constructors have selected population as higher secondary school students and their respective Parents, Teachers and Peers.

6.3. Sample of the Study

The sample has been selected in three stages. In first stage, 3 higher secondary schools were selected by using simple random sampling technique.

In second stage, the 100 higher secondary students (age group 15 to 18) were randomly selected by using simple random sampling technique.

In the last stage of sampling, the respective parents (both educated and uneducated & both rural and urban), peers and class teachers of the students were selected by using purposive sampling technique.

6.4. Tool of the Study

Tool is very essential instrument to measure or assess or evaluate any type of variables. In social science studies, the researchers should pay a great attention in searching or constructing a tool which it may be constructed or it available in readymade mode. The precise in measurement is directly depends on objectivity of the measuring tool. So the constructors have constructed Ei360⁰ Tool for assessing the Emotional Intelligence of higher secondary school student in unbiased manner.

7. Construction of the Ei360⁰ Tool

A quality research instrument alone helps a researcher

to obtain valid information from the respondents.

Reducing measuring bias and accuracy in measurement, the Ei360⁰ Tool has been constructed in feedback forms. It consisted with four different sub-scales such as self (student), teachers view, peers view and parent's view of Ei360⁰ Tool. The following procedures have been followed by the constructors for constructing the Ei360⁰ Tool.

7.1. Construction of Ei360⁰ Tool Statements

After selecting the dimension and its competencies for the Ei360⁰ Tool, the statements were constructed which reflects the meaning of the dimensions of Daniel Goleman. Initially self view sub scale is constructed. After reliability and validity measures, items were given in III person to teacher, peer and parents. The constructors have decided to measure Emotional Intelligence in five point descriptive rating scale such as, always, usually, sometimes, rarely and never.

The preliminary draft of Ei360⁰ Tool was constructed with 100 items. Single dimensional was constructed already by constructors. But going for 360⁰ tool would be letter and hence this study. Dimension wise item description of Ei360⁰ Tool is given below [Table 2](#).

Table 2. Dimension wise Items on Ei360⁰ Tool

S.No.	Domains of Emotional Intelligence	Number of Items
1	Self-Awareness	15
2	Social Awareness	15
3	Self-Management	30
4	Relationship Management	40
Total		100

7.2. Experts' Opinion

The preliminary draft was sent to the panel of experts. Above form of Ei360⁰ Tool of 100 statements was sent to faculties of Education for further recommendations.

The preliminary draft was finalized with 75 items out of 100 items. A statistical procedure called content validity ratio and it's were adopted to reduce items. According to Lawshe (2010) [10] developed a formula termed the content validity ratio as follows:

$$CVR = (Ne - N / 2) / (N / 2)$$

Where,

CVR- Content validity ratio,

Ne – Number of subject matter experts (SME) indicating "Essential",

N – Total number of SME experts.

7.3. Pre-Pilot Study of the Ei360⁰ Tool

The pre-pilot tryout was carried out keeping in mind the following objectives: to modify the instruction of the tool if required and to modify the statement if students find it ambiguous.

The pre tryout has conducted to reduce the ambiguousness in the statements. The tool of Ei360⁰ Tool has given to the higher secondary students and they are requested to provide feedback. If the students had doubts, they are

clarified and re modified. Ambiguous statements were removed by the investigator. The items were reduced 75 to 65.

7.4. Pilot Study of the Ei360⁰ Tool

The objective of the pilot study is to select statements for final form on the basis of statistical analysis. The pilot study was conducted with the sample of 300 higher secondary students of Thanjavur district.

7.5. Item Analysis

For item analysis, the questionnaire were scored and organized in descending order. The top 27% of were selected as upper group and bottom 27% were selected as lower group. For item selection the following t test formula was used.

The following formula was used (Edwards, 1957) [11] to calculate value of each items.

$$t = \frac{\bar{X}_H - \bar{X}_L}{\sqrt{\frac{S_H^2}{n_H} + \frac{S_L^2}{n_L}}}$$

Where

$\bar{X}_H$ = the mean score on a given statement for the high group

$\bar{X}_L$ = the mean score on a given statement for the low group

S_H^2 = the variance of the distribution of response of the high group of the statement.

S_L^2 = the variance of the distribution of response of the low group of the statement.

n_H = the number of subjects in the high group

n_L = the number of subjects in the low group

7.6. Pre Final Form of the Ei360⁰ Tool

The pre final form of the Ei360⁰ Tool was developed with 62 items which are selected of it t value. The t values of the item having 1.75 and higher were selected for pre final form Ei360⁰ Tool. The 62 statements selected for the pre final form of the Ei360⁰ Tool. After Selecting 62 items, the other subscales such as, teacher's view, peer's view, and parent's view have constructed with the same meaning of the items as in Self view with its modification of the subject (first person, second person and third person). Table 3 shows that dimension and sub dimension wise selected items of Ei360⁰ Tool.

Table 3. Dimension and sub dimension wise Selected Items on Ei360⁰ Tool

Dimension	Competencies	Item Number	Item type	Item status by content validity ratio	Item status by pre pilot study	Item status by 't' value	New item number for pre final form
Self-awareness	Emotional self-awareness	1	Positive	Selected	Selected	Selected	1
		2	Positive	Selected	Selected	Selected	2
		3	Negative	Not Selected	-	-	-
		4	Positive	Selected	Not Selected	-	-
		5	Positive	Selected	Selected	Selected	3
	Accurate self-assessment	6	Negative	Not Selected	-	-	-
		7	Positive	Selected	Selected	Selected	4
		8	Positive	Selected	Not Selected	-	-
		9	Positive	Selected	Selected	Selected	5
		10	Positive	Selected	Selected	Selected	6
	Self confidence	11	Positive	Not Selected	-	-	-
		12	Negative	Selected	Selected	Selected	7
		13	Positive	Selected	Selected	Selected	8
		14	Negative	Not Selected	-	-	-
		15	Positive	Selected	Selected	Selected	9
Self-management	Self-control	16	Positive	Selected	Selected	Selected	10
		17	Negative	Selected	Selected	Not Selected	-
		18	Positive	Selected	Selected	Selected	11
		19	Positive	Selected	Selected	Selected	12
		20	Negative	Selected	Selected	Selected	13
	Trustworthiness	21	Positive	Not Selected	-	-	-
		22	Positive	Selected	Selected	Selected	14
		23	Positive	Selected	Selected	Selected	15
		24	Negative	Selected	Not Selected	-	-
		25	Positive	Selected	Selected	Selected	16
	Conscientiousness	26	Positive	Selected	Selected	Selected	17
		27	Positive	Selected	Selected	Selected	18
		28	Positive	Not Selected	-	-	-
		29	Positive	Selected	Selected	Selected	19
		30	Negative	Selected	Not Selected	-	-

Dimension	Competencies	Item Number	Item type	Item status by content validity ratio	Item status by pre pilot study	Item status by 't' value	New item number for pre final form
	Adaptability	31	Positive	Selected	Selected	Selected	20
		32	Positive	Selected	Selected	Selected	21
		33	Positive	Selected	Not Selected	-	-
		34	Negative	Not Selected	-	-	-
		35	Positive	Selected	Selected	Selected	22
	Achievement drive	36	Positive	Selected	Selected	Selected	23
		37	Positive	Selected	Selected	Selected	24
		38	Positive	Selected	Selected	Selected	25
		39	Positive	Selected	Selected	Not Selected	-
		40	Negative	Not Selected	-	-	-
	Initiative	41	Positive	Selected	Selected	Selected	26
		42	Positive	Selected	Selected	Selected	27
		43	Negative	Not Selected	-	-	-
		44	Positive	Selected	Selected	Selected	28
		45	Negative	Selected	Selected	Selected	29
Social Awareness	Empathy	46	Positive	Selected	Selected	Selected	30
		47	Negative	Not Selected	-	-	-
		48	Positive	Selected	Selected	Selected	31
		49	Positive	Selected	Selected	Selected	32
		50	Positive	Not Selected	-	-	-
	Service orientation	51	Positive	Selected	Selected	Selected	33
		52	Positive	Selected	Selected	Selected	34
		53	Negative	Not Selected	-	-	-
		54	Positive	Selected	Selected	Selected	35
		55	Negative	Selected	Selected	Selected	36
	Organizational awareness	56	Positive	Selected	Selected	Selected	37
		57	Positive	Not Selected	-	-	-
		58	Positive	Selected	Selected	Selected	38
		59	Negative	Selected	Not Selected	-	-
		60	Positive	Selected	Selected	Selected	39
Relationship Management	Developing others	96	Positive	Selected	Selected	Selected	61
		97	Positive	Not Selected	-	-	-
		98	Positive	Selected	Selected	Selected	62
		99	Negative	Selected	Not Selected	-	-
		100	Positive	Not Selected	-	-	-
	Influence	61	Positive	Not Selected	-	-	-
		62	Positive	Selected	Selected	Selected	40
		63	Negative	Selected	Not Selected	-	-
		64	Positive	Selected	Selected	Selected	41
		65	Positive	Selected	Selected	Selected	42
	Communication	66	Positive	Not Selected	-	-	-
		67	Positive	Selected	Selected	Selected	43
		68	Negative	Not Selected	-	-	-
		69	Positive	Selected	Selected	Selected	44
		70	Negative	Selected	Selected	Selected	45
	Conflict management	71	Positive	Selected	Not Selected	-	-
		72	Positive	Selected	Selected	Selected	46
		73	Negative	Not Selected	-	-	-
		74	Negative	Selected	Selected	Selected	47
		75		Selected	Selected	Selected	48
	Leadership	76	Negative	Not Selected	-	-	-
		77	Positive	Selected	Selected	Selected	49
		78	Positive	Selected	Selected	Selected	50
		79	Positive	Not Selected	-	-	-
		80	Positive	Selected	Selected	Selected	51
	Change catalyst	81	Positive	Selected	Selected	Selected	52
		82	Positive	Not Selected	-	-	-
		83	Positive	Selected	Selected	Selected	53
		84	Negative	Selected	Not Selected	-	-
		85	Positive	Selected	Selected	Selected	54

Dimension	Competencies	Item Number	Item type	Item status by content validity ratio	Item status by pre pilot study	Item status by 't' value	New item number for pre final form
	Building bonds	86	Positive	Not Selected	-	-	-
		87	Positive	Selected	Selected	Selected	55
		88	Positive	Not Selected	-	-	-
		89	Positive	Selected	Selected	Selected	56
		90	Positive	Selected	Selected	Selected	57
	Teamwork & collaboration	91	Negative	Selected	Selected	Selected	58
		92	Positive	Selected	Selected	Not Selected	-
		93	Positive	Selected	Selected	Selected	59
		94	Positive	Not Selected	-	-	-
		95	Positive	Selected	Selected	Selected	60

7.7. Reliability, Validity and Norms of the Ei360⁰ Tool

A good tool should possess the qualities such as validity, reliability, norms etc. the investigator found the validity and reliability of the Ei360⁰ Tool and Norms has established.

7.8. Reliability

In the present study the reliability of the sub scales of Ei360⁰ Tool was found with the use of test retest method, split half method and internal consistencies method. The reliabilities of the Ei360⁰ Tool were calculated.

7.9. Validity

It is always related to the specific objectives or purpose of the test. It is simply called as "the degree of excellence in measurement". The following validities were found against Ei360⁰ Tool.

7.10. Face Validity

It is nothing but the readiness of the tool to measure, the sub scale of Ei360⁰ Tool were sent to the panel of subject experts. The suggestions things were made in the tool by the investigator.

7.11. Content Validity

The Ei360⁰ Tool includes all contents of Emotional Intelligence which has been given as dimensions in the Ei360⁰ Tool and they have been derived from the Daniel Goleman and Richard Boyatzis model of Emotional Intelligence. The subject experts suggested that all competencies of emotional intelligence were covered in the form of items. Content validity ratio of the Ei360⁰ Tool were calculated.

7.12. Construct Validity

Dimension and its items were constructed with the help of Daniel Goleman theory and validated the tool by a systematic procedure. The item selection is based on the 't' value of 1.75. the t values of the Ei360⁰ Tool were calculated.

7.13. Concurrent Validity

Concurrent validity refers to the degree to which the operationalization correlates with other measures of the same construct that are measured at the same time. For finding concurrent validity, the Ei360⁰ Tool was administered with the standardized tool of Anukool Hyde et al (2002) [12]. The scale has ten factors, these are self-awareness, empathy, self-motivation, emotional stability, managing relations, integrity, self-development, value orientation, commitment and altruistic behavior. The reliability of the Anukool Hyde et al EI scale was found to be 0.88 and the scale was administered the sample of 200 subject, the reliability index was calculated which show high validity on account of being 0.93. The inter related correlation were found and the concurrent validity of the Ei360⁰ Tool were calculated.

7.14. Intrinsic Validity

The intrinsic of the validity is also called as internal validity or numerical validity which refers the internal correlation of items of the tool. The intrinsic validity of the Ei360⁰ Tool were calculated

7.15. Scoring Procedure of the Ei360⁰ Tool

Scoring procedure is a procedure to follow for scoring the questions of the items by the user. The constructors have developed a scoring procedure and its description is given in Table 4 (statements on which more than one response is given or no response given are scored zero marks)

Table 4. Scoring Method of Ei360⁰ Tool

S.N	Type of Statement	Scores				
		Always	Usually	Some times	Rarely	Never
1	Positive	4	3	2	1	0
2	Negative	0	1	2	3	4

Based on the above procedure, the total scores for each student and their teachers, peers and parent were obtained. Maximum score of the tool is 248 and minimum is 0.

Two items for self-awareness and trust worthiness of Ei360⁰ Tool are given in Table 5a, Table 5b, Table 5c, and Table 5d.

Table 5a. Self View Sub- Scale of Ei360⁰ Tool

S.N	Statement	Responses				
		Always	Usually	Sometimes	Rarely	Never
1	I recognize how my thoughts affect behaviors.					
2	I accept my mistake pointed by others					

Table 5b. Peer View Sub- Scale of Ei360⁰ Tool

S.N	My Friend Name:.....	Responses				
		Always	Usually	Sometimes	Rarely	Never
1	He/ She recognize how his/ her thoughts affect behaviors.					
2	He/ She accepts my mistake pointed by others					

Table 5c. Teachers' View Sub- Scale of Ei360⁰ Tool

S.N	My Class Student Name:.....	Responses				
		Always	Usually	Sometimes	Rarely	Never
1	He/ She recognize how his/ her thoughts affect behaviors.					
2	He/ She accepts his/ her mistake pointed by others.					

Table 5d. Parents View Sub- Scale of Ei360⁰ Tool

S.N	My Son/ Daughter Name:.....	Responses				
		Always	Usually	Sometimes	Rarely	Never
1	He/ She recognize how his/ her thoughts affect behaviors.					
2	He/ She accepts his/ her mistake pointed by others					

8. Qualities of the Ei360⁰ Tool

The successiveness of the measuring tool is highly depends on the qualities of the tool such as validity, reliability and usability. The following are the qualities of the tool.

8.1. Reliability of the Ei360⁰ Tool

The reliability of the sub-scales of Ei360⁰ Tool was found by using test-retest method, split half method and internal consistencies method. The reliability values of the

Ei360⁰ Tool were calculated and shown in [Table 6](#).

In this, the calculated reliability values are all in high and it represented as the Ei360⁰ Tool has high stability and consistency.

8.2. Validity of the Ei360⁰ Tool

It is always related to the specific objectives or purpose of the test. It is simply called as “the degree of excellence in measurement”. The following validities were found against Ei360⁰ Tool. The description of the validities are given in [Table 7](#).

Table 6. Reliability Values of Ei360⁰ Tool

SN	Sub Scales of Ei360 ⁰ Tool	Reliability Statistics						
		Sample size	Cronbach's Alpha	Spearman brown coefficient		Gutterman Split half coefficient	Test re test	
				Equal length	Unequal length		Sample Size	r
1	Self	100	0.98	0.94	0.94	0.94	50	0.93
2	Teachers view	100	0.97	0.91	0.91	0.89	50	0.90
3	Peers view	100	0.97	0.94	0.94	0.93	50	0.92
4	Parents view	100	0.98	0.94	0.94	0.93	50	0.91

Table 7. Validity Values of Ei360⁰ Tool

SN	Methods of Validity	Values
1	Face Validity Face Validity for the items constructed by the constructors was deliberated by sending the tool the subject experts and by subsequent improvements suggested by the experts.	-
2	Content Validity Content validity for the items constructed by the constructors was deliberated by sending the tool the subject experts and suggested by the experts. The content validity ratio of Ei360 ⁰ Tool lies between $(CVR=(N_e-N/2)/(N/2))$	1.25 to 6.5
3	Construct Validity Construct validity for the items calculated by the constructors, the construct validity values of Ei360 ⁰ Tool lies between	1.83 to 4.88
4	Concurrent validity Correlation between the Emotional Intelligence Scale (Anukool Hyde et al.,) and Ei360 ⁰ Tool is self-administered.	0.97
5	Intrinsic Validity Intrinsic validity for the sub scales of Ei360 ⁰ Tool calculated, the value lies between	0.94 to 0.99

In this, the calculated Validity values are all in high and it is conclude as the Ei360⁰ Tool has validity.

8.3. Norms of the Ei360⁰ Tool

The constructors have computed Z score Norms for the tool. The Z-Score norms of the each sub-scales is given Table 8. Following formula are used to find Z –scores of each scale.

Table 8. Z Norms of Ei360⁰ Tool

S.No	Range of Z scores	Grade	Level of Emotional Intelligence
1	2.15 and Above	A	Extremely high
2	1.3 to 2.14	B	High
3	0.45 to 1.29	C	Above average
4	-0.44 to 0.44	D	Average
5	-0.45 to -1.29	E	Below average
6	-1.3 to -2.14	F	Low
7	-2.15 and Below	G	Extremely low

$$\text{Overall View } (\bar{X}_{Tot}) = \frac{(R1 + R2 + R3 + R4)}{4}$$

$$Z_{OLV} = \frac{\bar{X}_{Tot} - \bar{X}_{OLV}}{\sigma_{OLV}}$$

$$\text{Self View } Z_{SV} = \frac{R_1 - \bar{X}_{SV}}{\sigma_{SV}}$$

$$\text{Teacher's View } Z_{TV} = \frac{R_2 - \bar{X}_{TV}}{\sigma_{TV}}$$

$$\text{Parent's View } Z_{PV} = \frac{R_3 - \bar{X}_{OV}}{\sigma_{OV}}$$

$$\text{Peer's View } Z_{PEV} = \frac{R_4 - \bar{X}_{OV}}{\sigma_{OV}}$$

Where

R1 –Individual total Scores in Self-view Sub Scale of Ei360⁰ Tool

R2 –Individual total Scores in Teachers-view Sub Scale of Ei360⁰ Tool

R3 –Individual total Scores in Peers-view Sub Scale of Ei360⁰ Tool

R4 –Individual total Scores in Parents-view Sub Scale of Ei360⁰ Tool

$\bar{X}$ — Normalized Mean value of respective scale from the Table 9

σ —Normalized Mean value of respective scale from the Table 9

Table 9. Normalized Mean and Standard Deviation Scores for Ei360⁰ Tool

S.No	Views	Normalized Scores	
		Mean ($\bar{X}$)	Standard Deviation (σ)
01.	Teacher's View (TV)	113.79	41.26
02.	Self View (SV)	135.64	45.93
03.	Parent's View (PV)	115.25	42.27
04.	Peer's View (PEV)	116.99	43.44

9. Analysis of Correlation of the Sub-Scales of Ei360⁰ Tool

Correlation analysis is used to find the relationship level between the variables. The following Figure 2 shows the correlation values of sub-variables of Ei360⁰ Tool. (N=100).

Figure 2. Correlation among the Sub Scales of Ei360⁰ Tool

With reference of the Figure 2 it is evident that the correlation between the sub-groups such as self-teachers, self-peers, self-parents, parents-peers, parents-teachers, and peer-teachers are 0.95, 0.96, 0.96, 0.95, 0.96 and 0.92 respectively. In these, the r values are high which is significant at 0.01 levels. It means that the preciseness of measurement of EI by using Peers View Tool, Teacher view Tool and parents view tools are same as Self tool of Ei.

10. Conclusion

The Emotional Intelligence 360⁰ Tool (Ei360⁰ Tool) has been constructed and standardized by the tool constructors. It can be used to measure full circle Ei of a person.

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