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ROLE OF EMOTIONAL INTELLIGENCE ON ORGANIZATIONAL EFFECTIVENESS: A STUDY AMONG SCIENTIFIC PERSONNEL IN THE NATIONAL AGRICULTURAL RESEARCH AND EDUCATION SYSTEM (NARES) IN INDIA

Ramesh Pedaprolu*, Rao R. V. S.**

Abstract *Emotional intelligence (EI) is known to contribute for the success of individual or group, and plays an important role in organizational effectiveness through positive behavior. The purpose of the study was to find out the relationship between EI and different components of organization effectiveness viz., teamwork effectiveness, conflict-handling modes and leadership competencies of the scientific personnel in National Agricultural Research and Education System (NARES) in India. The data was collected from 234 respondents by administering EI Test (EIT), Teamwork Skill Questionnaire, Thomas-Kilmann Conflict Mode Instrument (TKI Test) and Leadership Effectiveness Profile. The results indicated that 93.2% of the participants recorded an average level of EI; whereas, only 6.8% have a high level of EI. Majority of participants (78.6%) recorded lower levels of teamwork effectiveness as against 19.2 and 2.2% having average and high levels of team work effectiveness, respectively. Among the conflict-handling modes, avoiding (37.2%), compromising (20.5%) and accommodating (20.1%) are the dominant modes employed by the participants. Among the leadership competencies, people enablement, directional clarity, driving persistence and change orchestration are the dominant reported competencies. EI is significantly and positively correlated with teamwork effectiveness and all the attributes of leadership effectiveness. Among the domains of EI, self-awareness, motivating oneself and handling relationships are significantly related to the teamwork effectiveness and leadership competencies. The findings of the study revealed the importance of EI in contributing the overall success of the organization through building up the teamwork effectiveness and contributing to the leadership competencies. The implication of the study includes the role of EI as important criteria in selection and recruitment and a competency to be trained in employee's in-service capacity building programs in order to improve the overall organizational effectiveness.*

Keywords: *Emotional Intelligence, Teamwork Effectiveness, Conflict-Handling Modes, Leadership Competencies, Organizational Effectiveness*

INTRODUCTION

National Agricultural Research and Education System (NARES) in India comprises a network of 100 Research Institutions working directly under Indian Council of Agricultural Research (ICAR), 73 Agricultural Universities and 716 Krishi Vigyan Kendras (KVKs). There are about 42,000 professionally trained scientific personnel employed in the NARES to look after research, education and extension activities. These scientific personnel were specialized in about 90 different disciplines of agricultural sciences covering horticulture, animal sciences, fisheries, engineering and social sciences.

Growth and survival of any organization in the present global environment of competition depends on their ability to intelligently discern the skill sets and capabilities required for effective and efficient functioning. Leaders who are authentic, emotionally self-aware and able to speak openly about their emotions have higher social and emotional quotient for success and sustaining organizational effectiveness and growth (Srivastava, 2013; Subramanian, 2016).

Emotional intelligence (EI) can best be described as "the ability to monitor one's own and other people's emotions, to discriminate between different emotions and label them

* Principal Scientist & Professor, HRM Division, ICAR-National Academy of Agricultural Research Management (NAARM), Hyderabad, Telangana, India. Email: pramesh.icar@gmail.com

** Principal Scientist and Head, HRM Division, ICAR-National Academy of Agricultural Research Management (NAARM), Hyderabad, Telangana, India.

appropriately, and to use emotional information to guide thinking and behavior" (Salovey et al., 2004). Salovey et al. (2004) proposed three models of EI. The "ability model" focuses on the individual's ability to process emotional information and use it to navigate the social environment. The "trait model" encompasses behavioral dispositions and self-perceived abilities and is measured through self-report (Petrides et al., 2007). The "mixed model" is a combination of both ability and traits. It defines EI as an array of skills and characteristics that drive leadership performance, as proposed by Goleman (1998). These findings pointed to different ways in which competencies such as empathy, learned optimism and self-control contributed to important outcomes in the family, the workplace and other life areas.

Recently, EI has been noted to be implied across the workplace having an essential component in determining the leadership effectiveness mainly when leaders are dealing with teams in the workplace. The application of EI gained significance when Goleman (1998) with his research in this area emphasized its role in organizations and showed increasing attention on EI. Overall, EI leaders inspire team members to work efficiently in order to achieve organizational goal. Barthwal and Juyal (2012) reported that EI has become the major rationale for senior-level manager's effectiveness and organizational growth. Employee functionality is determined by their level of self-awareness, self-regulation, motivation, social awareness and social skills, which are primary factors determining the employee EI level.

Studies conducted by Masa'deh (2016) revealed that there were significant positive impacts of management of one's own emotion, awareness of other's emotion, and management of other's emotion on organizational effectiveness. Also, the results revealed that there was no significant difference in the impact of EI on organizational effectiveness that could be attributed to gender. However, there were significant differences in the impact of EI on organizational effectiveness in favor of age and experience.

Recently, some of the Indian business organizations have started concentrating on the emotional dimension of the human resource dealing with those non-cognitive human competencies and potentialities, which have a significant impact on the various aspects of organizational climate and effectiveness. Priya (2016) studied the relationship between the organizational climate and EI and suggested that core components of organizational climate viz., leadership effectiveness, communication, stress management and trust levels among employees are significantly related to EI competencies of employees; further, the dimensions of EI, namely, self-awareness, resilience and interpersonal connectivity have a predictive relationship with leadership effectiveness, communication, stress management and trust levels among organizational members.

Rathi and Renu (2008) studied the relationship between EI and occupational self-efficacy of 112 scientists in a number of research organizations and their results indicated that the EI has a positive relationship with occupational self-efficacy and is found to be one of its significant predictor. The study implies that people with higher EI are more effective employees as compared to those with lower EI. Stubbs and Wolff (2008) reported that the team leader's EI is significantly related to the presence of emotionally competent group norms on the teams they lead, and that emotionally competent group norms are related to the team performance. Similarly, Rosete and Joseph (2007) found out that higher EI was associated with higher leadership effectiveness.

EI plays a key role and it is more vital than any other human capital asset in organizations. As the pace of work greater demands individual competencies, EI is the centrality of the substance of the individual or group for their effective management. Indeed, fitting new insights into people's neural and emotional circuitry, EI accounts for 85 to 95% of the success of organizational leaders (Deepika, 2012; Anddison & Okaomee, 2017). Since majority of the concerns in organization involve people in different job roles, the competencies possessed by the people will have a bearing on the extent to which they can actualize their EI (Jyothirmani et al., 2020).

Gupta and Devalina (2015) reported that positive emotions were found to be pivotal in enhancing employee performance, encouraging innovation and creativity that results in sustainable business practices, helping organization make good decisions, facilitating work-flow and motivation, developing authentic and charismatic leadership styles, job enrichment and better team performance. Kumari and Rastogi (2017) reported that achieving organizational effectiveness is the ultimate purpose of any organization that takes enormous effort to maximize employees' task efficiency, commitment and sustains intrinsic motivation to perform well in difficult times. Pooja (2019) reported that EI was found to be positively correlated with coping self-efficacy and negatively correlated with occupational stress of employees and, hence, improves the organizational effectiveness.

The role of EI in achieving organizational effectiveness is very significant, and it is reiterated in studies carried out across the globe (Collins & Cooper, 2014; Das & Ali, 2014; Walia & Paramjit, 2014; Sarangi & Aakanksha, 2015; Chao et al., 2017; Tahir et al., 2019; Zorana et al., 2020). However, the assessment and predictability of EI leading to success in scientific organization like Indian Council of Agricultural Research (ICAR) is still a very important issue to be addressed. However, information on the relationship between EI and organizational effectiveness among the scientific personnel in the National Agricultural Research and Education System (NARES) in India is lacking and, hence, the present study was undertaken with the following objectives:

- To measure the EI of scientific personnel in NARES.
- To assess the organizational effectiveness of scientific personnel viz., teamwork skills, conflict-handling modes and leadership competencies.
- To find out the relationship between EI and organizational effectiveness of scientific personnel in NARES.

METHODOLOGY

Sample

The present study was conducted on the scientific personnel working in the National Agricultural Research and Education system (NARES) in India. The sample includes scientists working in various research institutes under Indian Council of Agricultural Research (ICAR), professors in State Agricultural Universities (SAU's) and extension personnel from Krishi Vigyan Kendras (KVKs). The respondents in the study are the participants in various capacity building programs being organized by the National Academy of Agricultural Research Management (NAARM), Hyderabad, India a training academy under ICAR during the period 2018-2020. A total of 234 personnel from different states of India participated in the study. Among the participants, 91.5% were males (n = 214) and 8.5% were females (n = 20). The age of the participants ranged from 30 to 61 years with an average of 49.8 years and a standard deviation of 6.36. Their educational levels varied from post-graduation to PhD in their respective disciplines in agricultural and allied subjects. The participants have a professional experience ranging from 6 to 32 years with an average of 20.2 years and a standard deviation of 7.22.

Measurement Tools

EI Test (EIT) (Sharma, 2011)

The EIT constitutes of 60 items from five domains of EI (Goleman, 1995):

- *Self-Awareness:* Knowing what we are feeling at the moment and using those preferences to guide our decision-making; having a realistic assessment of our own abilities and a well-grounded sense of self-confidence.
- *Managing Emotions:* Handling our emotions so that they facilitate rather than interfere with the task at hand; being conscientious and delaying gratification to pursue goals; recovering well from emotional distress.
- *Self-Motivation:* Using our deepest preferences to move and guide us towards our goals, to help us take initiatives and strive to improve, and to persevere in the face of setbacks and frustrations.
- *Empathy:* Sensing what people are feeling, being able to take their perspective, and cultivating rapport and attunement with a broad diversity of people.
- *Handling Relationships:* Handling emotions in relationships well and accurately reading social situations and networks; interacting smoothly; using these skills to persuade and lead, negotiate and settle disputes, for cooperation and teamwork.

The reliability of the test was determined by split-half method using odd-even procedure, and the reliability coefficient was 0.73. The response pattern in the scale is of Likert type i.e., on a five-point continuum from always, most often, occasionally, rarely to never. As all the items are socially acceptable, though positively and negatively stated, the scoring for each statement in the scale is done in descending/ ascending order for determining the EI by giving a score of 5 for always, 4 for most often, 3 for occasional, 2 for rarely, 1 for never and reverse for negative items. In this way, the expected scores may range from 60 to 300 with high scores showing high degree of EI and low scores showing low degree of EI.

Teamwork Skill Questionnaire (University of South Australia, 2011)

The instrument had been sourced from the Internet and had been developed for evaluating teamwork skill effectiveness. The instrument is comprised of 15 questions designed on a 5-point scale (very frequently, frequently, sometimes, rarely and never). For each of 15 teamwork skills, participants self-evaluated their level of skill in working in a team. The score sheet assigned values from 0 to 3 for each answer. Thus, the minimum score obtained is 15 and the maximum possible score is 45. Score obtained between 40 to 45 is considered as "High", between 35 to 40 considered as "Average" and less than 35 is considered as "Low" team effectiveness. The reliability coefficient of the instrument based on Test-Retest method is 0.67 (Brock et al., 2017).

Thomas-Kilmann Conflict Mode Instrument (TKI Test) (Thomas & Kilmann, 1974 & 2010)

The TKI test is a self-report questionnaire designed to measure how one deals with interpersonal conflict and consists of 30 pair of statements describing possible behavioral responses A and B, and one has to select the most characteristic response of his/her own. It is designed to assess a person's behavioral response to conflict situations. "Conflict situations" are those where the interests or concerns of two people are seemingly incompatible. In such a situation, an individual's behavior has two dimensions: (1) assertiveness, the extent to which the person attempts to fulfill their own interests and (2) cooperativeness, the extent to which the

person attempts to fulfill the opponent's interests. These two basic dimensions of behavior define five different modes for responding to conflict situations. Reliability coefficient of the instrument based on Test-Retest method was found to be 0.68, which is significant at 0.01 level of significance. These five conflict-handling modes are shown below:

- *Competing:* It is assertive and uncooperative. In this mode, you try to satisfy your own concerns at the other person's expense.
- *Collaborating:* It is both assertive and cooperative. In this mode, you try to find a win-win solution that completely satisfies the concerns of both individuals involved.
- *Compromising:* It is intermediate in both assertiveness and cooperativeness. In this mode, you try to find an acceptable solution that only partially satisfies both individual's concerns.
- *Avoiding:* It is both unassertive and uncooperative. In this mode, you work to sidestep the conflict without attempting to satisfy either individual's concerns.
- *Accommodating:* It is unassertive and cooperative. In this mode, you try to satisfy the other person's concerns at the expense of your own concerns.

The individual's dominant conflict-handling mode is being assessed based on the highest score obtained among the five modes.

Leadership Effectiveness Profile (HRD Press, 2012)

This assessment profile is a 96 item, self-scoring assessment of the following eight leadership competencies:

- *Emotional Intelligence:* Looks at our capacity to recognize, understand and harness our own feelings and the feelings of others.
- *Contextual Thinking:* Looks at how well the individual links specific events, tasks and actions in a wider perspective or pattern.
- *Directional Clarity:* Looks at the ability to identify a credible destination and indicate how to get there in a straightforward and simple way.
- *Creative Assimilation:* Looks at how well an individual creatively draws together disparate information to arrive at robust decisions or course of action.
- *Change Orchestration:* Looks at how well an individual anticipate and plans for future change and manage themselves and others to handle it well.
- *People Enablement:* Looks at the extent to which an individual trust, coaches and guides people to influence and control of their own destiny, through their own efforts.
- *Reciprocal Communications:* Looks at the extent to which an individual communicates with economy and clarity and remains open to feedback.
- *Drive Persistence:* Looks at the extent to which an individual tenaciously stays on track and maintains a persistent focus on their goals.

Each leadership competency uses ratings of 12 behaviors to develop a dimension score. The respondent must mark for each statement on a five-point scale viz., Almost Never, Occasionally, Frequently, Very Frequently and Almost Always and carries a weightage of 1 to 5. The average score in each leadership competency is worked out (Total score/12) and ranges from 1 to 5. The leadership competencies are rated as 'Low', if the average scores are less than 2.75, 'Average', if the scores ranges from 2.76 to 3.49 and 'High', if the scores are more than 3.5. The reliability coefficient of the instrument based on Test-Retest method is 0.72 and the internal reliability (Cronbach alpha coefficient) is 0.80.

Procedure

The data was collected from the participants during various capacity-building training programs conducted by the Academy during 2018-20. Emotional Intelligence Test (EIT), Teamwork Skill Questionnaire, Thomas-Kilmann Conflict Mode Instrument and Leadership Effectiveness Profile were administered to the participants, after briefly explaining the purpose of these tests. Scoring keys and interpretations norms were provided to find out the level of EI, effective teamwork person, conflict-handling modes and leadership competencies of participants. The researcher personally administered the tools to the participants and collected the data over a period of two sessions of 3 hours each. Tests were scored, tabulated and descriptive statistic indicators were calculated using MS Excel. Pearson's correlations were calculated between the variables in the study along with the age of the participants as a variable.

RESULTS AND DISCUSSION

EIT scores of participants (n = 234) varied from 153 to 239 as minimum and maximum with an average of 204 and a standard deviation of 12.66. Among the participants, 218 (93.2%) have recorded the average level of EI and 16 (6.8%) recorded the high level of EI. Among the domains of EI, "self-awareness" scores ranged from 29 to 54 with an average of 38.4 and a standard deviation of 3.86. Among the participants, 223 (95.3%) have average and 11 (4.7%) have high level of self-awareness. The scores in "Managing Emotions" domain ranged from 12 to 30 as minimum and maximum with an average of 20.7 and a standard deviation of 2.39. Among the participants, 4 (1.7%) have low, 222 (94.9%) have average and 8 (3.4%) have high levels in Managing Emotions. The scores in 'Motivating Oneself'

domain ranged from 34 to 64 with an average of 50.7 and a standard deviation of 4.34. Among the sample, 159 (67.9%) have recorded average and 75 (32.1%) have recorded high level of scores in Motivating oneself. The score in 'Empathy' domain ranged from 18 to 41 with an average score of 29.3 and a standard deviation of 3.49. Among the participants, 3 (0.9%) have low, 225 (96.1%) have average and 6 (2.6%) have high level of Empathy. The scores in "Handling Relationships" domain ranged from 38 to 78 with an average score of 64.8 and a standard deviation of 6.06. Among the sample, 2 (0.9%) have low, 205 (87.6%) have average and 27 (11.5%) have high level of scores in Handling relationships domain (Table 1).

Table 1: Scores and Levels of Emotional Intelligence among the Participants

Domains of Emotional Intelligence	Score Range	Scores Obtained			Standard Deviation	Levels of Emotional Intelligence		
		Min	Max	Average		Low	Average	High
Self-Awareness	12-60	29	54	38.4	3.86	-	223* (95.3)**	11 (4.7)
Managing Emotions	07-35	12	30	20.7	2.39	4 (1.7)	222 (94.9)	8 (3.4)
Motivating Oneself	14-70	34	64	50.7	4.34	-	159 (67.9)	75 (32.1)
Empathy	09-45	18	41	29.3	3.49	3 (1.3)	225 (96.1)	6 (2.6)
Handling Relationships	18-90	38	78	64.8	6.06	2 (0.9)	205 (87.6)	27 (11.5)
Total (E.I.) Score	60-300	153	239	204	12.66	-	218 (93.2)	16 (6.8)

*Number of Participants, **Percent of Participants

The Team Effectiveness scores of participants ranged from 22 to 42 as minimum and maximum with an average of 31.7 and a standard deviation of 3.99. Among the participants, 184 (78.6%) have recorded low, 45 (19.2%) average and 5 (2.2%) high levels of team effectiveness (Table 2).

Table 2: Scores and Levels of Team Effectiveness among the Participants

Team Effectiveness	Score
Score Range	15 - 45
Minimum Score	22
Maximum Score	43
Average Score	31.7
Standard Deviation	3.99
Levels of Team Effectiveness	**Number of Participants**
Low (Score < 35)	184 (78.6)*
Average (Score 35 – 40)	45 (19.2)
High (Score > 40)	5 (2.2)

*Percent of Participants

Regarding Thomas-Kilmann Conflict-handling modes, the scores in "Competing" mode ranged from 0 to 10 with an average of 4.4 and a standard deviation of 2.76. Among the participants, 21 (9.0%) have recorded competing as a dominant type of conflict-handling mode. The scores in "Collaborating" mode ranged from 1 to 11 with an average of 5.5 and a standard deviation of 2.01. Among the participants, 31 (13.2%) have recorded collaborating as a dominant mode of conflict-handling mode. The scores in "Compromising" mode ranged from 0 to 12 with an average of 6.42 and a standard deviation of 2.34. Among the participants, 48 (20.5%) have recorded compromising as a dominant mode of conflict-handling modes. The scores in "Avoiding" mode ranged from 2 to 12 with an average of 7.3 and a standard deviation of 2.05. Among the participants, 87 (37.2%) have recorded avoiding as a dominant conflict-handling mode. The scores in "Accommodating" mode ranged from 1 to 11 with an average of 6.33 and a standard deviation of 2.24. Among the participants, 47 (20.1%) have recorded accommodating as a dominant conflict-handling mode (Table 3).

Table 3: Thomas-Kilmann Conflict Mode Instrument Scores of the Participants

Conflict-Handling Modes	Score Range	Scores Obtained			Standard Deviation	Number of Participants Claiming Dominant Mode
		Min	Max	Average		
Competing (Forcing)	0-12	0	10	4.40	2.76	21 (9.0)*
Collaborating (Problem Solving)	0-12	1	11	5.50	2.01	31 (13.2)
Compromising (Sharing)	0-12	0	12	6.42	2.34	48 (20.5)
Avoiding (Withdrawal)	0-12	2	12	7.30	2.05	87 (37.2)
Accommodating (Soothing)	0-12	1	11	6.33	2.24	47 (20.1)

*Percent of Participants

About Leadership Effectiveness, the scores in "Emotional Intelligence" competency ranged from 2.3 to 4.83 with an average of 3.42 and a standard deviation of 0.51. Among the participants, 5 (2.1%) have low, 187 (79.9%) average and

42 (18.0%) have high level of EI. The scores in "Contextual Thinking" competency ranged from 2.33 to 4.75 with an average of 3.45 and a standard deviation of 0.56. Among the sample, 20 (8.5%) have low, 170 (72.6%) average and 44 (18.8%) high level of competency in contextual thinking. The scores in "Directional Clarity" competency of participants ranged from 2.25 to 4.92 with an average of 3.55 and a standard deviation of 0.58. Among the participants, 22 (9.4%) have low, 142 (60.7%) average and 70 (29.9%) high levels of competency in directional thinking. The scores in "Creative Assimilation" competency of participants ranged from 2.05 to 4.92 with an average of 3.42 and a standard deviation of 0.57. Among the participants, 36 (15.4%) have low, 153 (65.4%) average and 45 (19.2%) high levels of competency in creative assimilation. The scores in the "Change Orchestration" competency ranged from 2.33 to 5.0 with an average of 3.51 and a standard deviation of 0.57. Among the participants, 28 (12.0%) have low, 154 (65.8%) average and 52 (23.2%) high levels of competency in change orchestration. The scores in "People Enablement" competency of participants ranged from 2.58 to 5.0 with an average of 3.71 and a standard deviation of 0.59. Among the participants, 8 (3.4%) have low, 127 (54.3%) average and 99 (42.3%) high levels of people enablement competency. The participants' scores in "Reciprocal Communication" competency ranged from 2.16 to 5.0 with an average of 3.49 and a standard deviation of 0.62. Among the participants, 32 (13.3%) have low, 133 (56.8%) average and 69 (29.5%) high levels of competency in reciprocal communication. The scores of participants in "Driving Persistence" competency ranged from 2.16 to 5.0 with an average of 3.54 and standard deviation of 0.62. Among the participants, 22 (9.4%) have low, 130 (55.6%) average and 82 (35.0%) high levels of competency in driving persistence (Table 4).

Table 4: Leadership Effectiveness Scores of the Participants

Leadership Competencies	Score Range	Scores Obtained			Standard Deviation	Level of Leadership Competency		
		Min	Max	Average		Low	Average	High
Emotional Intelligence	1-5	2.30	4.83	3.42	0.51	5* (2.1)**	187 (79.9)	42 (18.0)
Contextual Thinking	1-5	2.33	4.75	3.45	0.56	20 (8.5)	170 (72.6)	44 (18.8)
Directional Clarity	1-5	2.25	4.92	3.55	0.58	22 (9.4)	142 (60.7)	70 (29.9)
Creative Assimilation	1-5	2.05	4.91	3.42	0.57	36 (15.4)	153 (65.4)	45 (19.2)
Change Orchestration	1-5	2.33	5.00	3.51	0.57	28 (12.0)	154 (65.8)	52 (22.2)
People Enablement	1-5	2.58	5.00	3.71	0.59	8 (3.4)	127 (54.3)	99 (42.3)
Reciprocal communication	1-5	2.16	5.00	3.49	0.62	32 (13.7)	133 (56.8)	69 (29.5)
Driving Persistence	1-5	2.16	5.00	3.54	0.62	22 (9.4)	130 (55.6)	82 (35.0)

*Number of Participants
**Percent of Participants

Pearson's multiple correlation coefficients were calculated to quantify the relationship among the variables in the study. The data indicated that EI (TEI values) are significantly positively correlated with age of the participants and different domains of EI viz., self-analysis, motivating oneself, empathy and handling relationships. However, the age of participants is significantly negatively correlated with leadership competencies such as contextual thinking, creative assimilation, change orchestration and reciprocal communication of the participants. Self-analysis is significantly positively correlated with other domains of EI, accommodating mode of conflict-handling and majority of the competencies under leadership effectiveness. Managing emotions is positively correlated with the team effectiveness. Motivating oneself is significantly positively correlated with remaining domains of EI, team effectiveness and all the competencies in leadership effectiveness. Empathy is positively correlated with handling relationships and total EI. However, handling relationships domain is significantly positively correlated with TEI and all the competencies in leadership effectiveness. Similarly, TEI significantly positively correlated with team effectiveness and all the competencies in the leadership effectiveness (Table 5).

Team effectiveness is positively correlated with the accommodating mode of conflict-handling and it is negatively correlated with all the competencies in leadership effectiveness. Competing and collaborating modes are negatively correlated with the compromising and avoiding modes of conflict-handling situations. Contextual thinking and creative assimilation are positively correlated with age, motivating oneself, handling relationships and TEI. However, change orchestration and reciprocal communication are negatively correlated with age and positively correlated with self-analysis, motivating oneself, handling relationships and TEI. Directional clarity and people enablement are positively correlated with self-analysis, motivating oneself, handling relationships and TEI.

Table 5: Multiple Correlation Coefficient of the Variables in the Study (*$p < 0.05$ and **$p < 0.01$)

	Age	SA	ME	MO	E	HR	TEI	TE	Compet	Collab	Comp-ro	Avoid	Accom	EI	CT	DC	CA	CO	PE	RC	DP
Age	1.000																				
SA	0.132	1.000																			
ME	0.116	0.015	1.000																		
MO	0.012	0.301**	0.000	1.000																	
E	0.014	0.267**	0.075	0.341**	1.000																
HR	0.047	0.267**	0.134	0.477**	0.348**	1.000															
TEI	0.166*	0.599**	0.104	0.755**	0.595**	0.768**	1.000														
TE	0.042	0.005	0.185**	0.168*	0.056	0.102	0.164*	1.000													
Com-pet	-0.008	-0.023	0.009	0.066	-0.049	-0.045	-0.009	-0.036	1.000												
Collab	-0.032	0.030	0.020	-0.004	0.097	0.047	0.070	-0.094	-0.067	1.000											
Com-pro	-0.078	-0.102	-0.014	-0.073	-0.010	0.023	-0.048	0.002	-0.439**	-0.163*	1.000										
Avoid	0.028	0.057	0.024	0.009	-0.013	0.018	0.033	-0.077	-0.176	-0.344**	-0.1-92**	1.000									
Ac-com	0.078	0.149*	-0.031	-0.014	0.017	0.003	0.019	0.157*	-0.480**	-0.178*	-0.105	-0.052	1.000								
EI	0.134	0.189**	0.043	0.341**	0.146*	0.283**	0.358**	0.281**	-0.024	-0.067	-0.026	0.056	0.021	1.000							
CT	-0.239**	0.149*	-0.106	0.294**	0.068	0.313**	0.290**	-0.326**	0.073	0.051	-0.088	-0.034	-0.083	0.632**	1.000						
DC	-0.108	0.174*	-0.078	0.354**	0.033	0.253**	0.284**	-0.376**	0.063	-0.010	-0.071	0.070	-0.075	0.626**	0.699**	1.000					
CA	-0.184**	0.109	-0.062	0.245**	0.024	0.239**	0.243**	-0.236**	0.065	0.047	-0.024	0.016	-0.126	0.515**	0.653**	0.663**	1.000				
CO	-0.139*	0.150*	-0.013	0.236**	-0.063	0.206**	0.217**	-0.253**	0.012	-0.012	-0.022	0.038	-0.077	0.577**	0.633**	0.679**	0.760**	1.000			
PE	-0.130	0.198**	-0.016	0.279**	-0.053	0.242**	0.261**	-0.400**	-0.012	-0.035	-0.027	0.085	-0.077	0.594**	0.605**	0.623**	0.561**	0.657**	1.000		
RC	-0.143*	0.176**	-0.119	0.284**	0.016	0.278**	0.264**	-0.395**	-0.041	0.030	0.009	-0.002	-0.062	0.551**	0.612**	0.619**	0.632**	0.713**	0.696**	1.000	
DP	-0.103	0.116	-0.092	0.237**	-0.009	0.217**	0.199**	-0.322**	0.084	-0.088	-0.035	0.054	-0.101	0.587**	0.584**	0.648**	0.649**	0.646**	0.657**	0.685**	1.000

SA: Self-Awareness, ME: Managing Emotions, MO: Motivating Oneself, E: Empathy, HR: Handling Relationships, TEI: Total Emotional Intelligence,

TE: Team Effectiveness, Compet: Competing, Collab: Collaborating, Compro: Compromising, Avoid: Avoiding, Accom: Accommodating,

EI: Emotional Intelligence, CT: Contextual Thinking, DC: Directional Clarity, CA: Creative Assimilation, CO: Change Orchestration, PE: People Enablement, RC: Reciprocal Communication, DP: Driving Persistence

EI is composed of factors that are critical to organizational excellence. It influences positive behavior and results to organizational success often measured by productivity, profitability, stability and sustainability. Managing for organizational excellence requires the mastery of internal pressures such as task demands, interpersonal relationships, organizational structures and arrangements, work conditions, management styles and behaviors, and the need for the allocative efficiency of scarce resources (Ramesh, 2017; Nkeobuna, 2019).

In the present study, EI and its components are positively related to the teamwork effectiveness and all the attributes of leadership effectiveness. Emerging evidence suggests that effective organizational behavior by emotionally intelligent managers is an essential step to achieving various organizational goals. Recent research studies have also indicated that managers always need to balance exploration of new resource combinations with exploitation of existing organizational capabilities. They need to develop their leadership styles and maintain emotionally balanced behavior in different setups of organizations (Singhal et al., 2014).

Sarangi and Aakanksha (2015) reported that there is a positive relationship between EI and employee engagement. Emotionally intelligent individuals can show more vigor, dedication and absorption. These findings are in line with earlier studies where EI positively impacted job satisfaction organizational commitment and job attitudes (Carmeli, 2003; Petrides & Furnham, 2006; Brunetto et al., 2012; Seyal & Afzaal, 2013). The human resource managers in different organizations perform the duty of developing self-awareness, self-regulation, social awareness and social skills and relationship management among employees through improving the employees' EI skills. Managers promote these skills in which employees feel comfortable and response their opinions, thereby organization growth is successful (Sakthivel, 2017).

Rezvani and Hashemi (2018) showed that there was a positive and significant relationship between EI and organizational commitment. Employees with high EI have been noticed to have better cooperation, creativity and communication among them. They show a better person; they can understand, express and manage their emotions, which affect their attitude towards their work, colleagues, managers, executives and their commitment to the organization.

Today's managers face complex challenges of coping with the rapid business environmental changes for efficient management of organizational resources and capabilities by involving technology, creativity, innovation and sustainability. Keeping the staff motivated and committed, promoting teamwork for attaining mutual goals, and managing and developing talent implications in a diverse workforce are few more challenging needs to be satisfied by both public and private organizations to ensure overall effectiveness (Tahir et al., 2019). In a challenging situation, EI of both the leader and the employee plays a significant role to face the problem, as reported by Collins and Cooper (2014), "there is a golden thread that connects people and their performance to organizational effectiveness". Hence, it is the contributions of an individual and group in the form of well-being and behaviors that can build up "an emotionally intelligent workplace".

In the present study, teamwork effectiveness of majority of participants (78.6%) is low and this may be since the EI of 93.2% of participants is found to be average. Similarly, EI is found to be positively associated with the teamwork effectiveness of the participants in the study. Priyan et al. (2016) reported that people with high EI are better at teamwork, punctual, accurate and more competent as compared to the ones who score low on EI. In accordance with theoretical predictions, EI along with all its components – emotional perception, emotional appraisal and emotional regulation – was significantly correlated to all indicators of job performance, including punctuality, competence, accuracy and teamwork. The present study contributes to a growing body of literature seeking to find the relationship between EI and teamwork, suggesting EI is one of the best predictor for teamwork effectiveness of the employees. Jyothirmani et al. (2020) also reported that EI has a significant relationship with the competencies of people management, team orientation, problem-solving and the competency of communication in organizational executives.

In the present study, the dominant conflict-handling modes employed by the participants are avoiding, compromising and accommodating as against competing mode. Khosravi et al. (2019) demonstrated that EI is positively linked to performance and that this association is facilitated by EI's negative link to three conflict modes (task, relationship, process), which are negatively connected to performance.

Researchers proposed that an individual's EI influences one's way of handling interpersonal conflict. Individuals' with high EI may be more effective in resolving conflict than those with low EI (Goleman, 1998; Mayer et al., 1997). Barrett et al. (2000) emphasized that individuals with high EI prefer to seek cooperative solutions when confronted with conflict. Emotionally intelligent employees are better at negotiation and effectively handling of their conflicts with organizational members. A growing number of scholars suggest that EI plays an important role in managing interpersonal conflicts (Rahim, 2001; Smarty et al., 2018; Bolanle et al., 2019).

EI as a single variable has a positive and significant correlation with problem solving, asserting, compromising and accommodating styles of conflict management.

However, there is no correlation between EI and avoiding style of conflict management. The results show that EI of an individual affects his handling of a conflict situation. It means that knowledge of self and of others helps in the resolution of conflicts through collaborative and cooperative methods (Sharma & Sehrawat, 2014).

EI and its components were positively associated with the competencies in the leadership effectiveness in the present study. Singh (2007) also reported that there were positive and significant relationships of EI with organizational leadership. The study indicates that the improvement in employees' EI helps in development of effective leadership behavior in organizations. In other words, if the top management of an organization wants its members to display effective leadership behaviors, it needs to possess emotionally intelligent employees.

Shafiq and Rana (2016) revealed a significant relationship of EI to organizational commitment. EI also displayed significant positive relationships with three components of organizational commitment and reflected a reasonable power of predictability towards the organizational commitment. Chao Miao et al. (2017) reported that the employees with higher EI have higher job satisfaction, higher organizational commitment and lower turnover intentions. EI improves job satisfaction by helping employees reduce negative feelings, by increasing positive feelings and/or by improving job performance. To produce productive and satisfied workers, organizations should incorporate EI in employee recruitment, training and development programs.

There is a clear relationship between a person's mood and various aspects of performance, such as teamwork, creativity, decision-making and task performance. Negative moods can drain energy and prevent people from doing their best. Meanwhile, the presence of positive emotions can enable individuals to do the best they can. Therefore, it is important for leaders in an organization to have EI so that they can maintain the balancing of emotions to motivate and inspire people around them (Kailola, 2019). In a national study of employees across industries, Zorana et al. (2020) examined the role of supervisor's emotionally intelligent behavior for employee opportunity to grow, their affect at work and creativity/innovation at work. The finding revealed that the supervisor's emotionally intelligent behavior was linked to employee creativity/innovation through its effect on employee opportunity to grow and higher experience of positive affect.

CONCLUSION

The findings of the study showed that there was a strong relationship between EI and different components of organizational effectiveness viz., teamwork effectiveness and all the attributes of leadership effectiveness. Among the domains of EI, self-awareness, motivating oneself and handling relationships are significantly related to teamwork effectiveness and leadership competencies. The most dominant conflict-handling modes employed by scientific personnel include avoiding, compromising and accommodating as against competing mode. In general, participants in the study have average levels of EI and possess low levels of teamwork effectiveness, which reflect their need for improvement of these competencies through appropriate in-service capacity-building programs. The dominant leadership competencies found in the study includes people enablement, directional clarity, driving persistence and reciprocal communication and all these competencies are strongly related to the EI.

Achieving organizational effectiveness is the ultimate purpose of any organization that takes enormous effort to maximize employees' task efficiency, commitment and sustains intrinsic motivation to perform well in difficult times. The findings of the study have practical implications for the improvement of organizational effectiveness such as selection and recruitment of employees having higher EI and for providing in-service training on EI for the existing employees to boost their overall psychological well-being.

The limitation in the present study is that individual's EI is measured and interpreted in terms their group behavior such as teamwork and leadership effectiveness. However, group EI is not simply the sum of the individual EI of group members. Having a few people with high individual EI is not enough to generate the conditions necessary for teamwork and group effectiveness. Groups also need norms and enduring processes that support awareness and regulation of an emotion within the group. Future researchers need to study to measures both individual EI and group EI and then examines whether adding group EI increases our ability to predict group effectiveness.

REFERENCES

Anddison, C. E., & Okaomee, A. A. (2017). Devolving the thought on workplace emotions for gainful research: A theoretical reflection. *Journal of Organization and Human Behaviour*, *6*(3), 1-14.

Barrett, L. F., Lane, R. D., Sechrest, L., & Schwartz, G. E. (2000). Sex differences in emotional awareness. *Personality & Social Psychology Bulletin*, *26*(9), 1027-1035.

Barthwal, S., & Juyal, S. A. (2012). Emotional intelligence as a measure of an employee's overall effectiveness. *Drishtikon: A Management Journal*, *3*(5), 140-176.

Bolanle, O., Kelechi, A. O., & Adepeju, O. (2019). Resilience, emotional intelligence and burnout in hotel employees. *Journal of Organization and Human Behaviour, 8*(2&3), 44-55.

Brock, S., Loewy, Z., & Loh, F.-H. (2017). Team skills: Comparing pedagogy in a graduate business school to that of a college of pharmacy professional program. *Proceedings of the Informing Science and Information Technology Education Conference*, Vietnam (pp. 11-20). Santa Rosa, CA: Informing Science Institute. Retrieved from http://www.informingscience.org/Publications/3733

Brunetto, Y., Teo, S. T., Shacklock, K., & Farr-Wharton, R. (2012). Emotional intelligence, job satisfaction, well-being and engagement: Explaining organizational commitment and turnover intentions in policing. *Human Resource Management Journal, 22*(4), 428-441. Retrieved from http://dx.doi.org/10.1111/j.1748-8583.2012.00198.x

Carmeli, A. (2003). The relationship between emotional intelligence and work attitudes, behavior and outcomes: An examination among senior managers. *Journal of Managerial Psychology*, *18*(8), 788-813. Retrieved from http://dx.doi.org/10.1108/02683940310511881

Collins, C., & Cooper, J. E. (2014). Emotional intelligence and the qualitative researcher. *The International Journal of Qualitative Methods*, *13*(1), 88-103.

Das, S. C., & Ali, W. (2014). Relationship between emotional intelligence and job satisfaction of banking employees: A descriptive study. *Journal Organization and Human Behaviour*, *3*(2&3), 24-30.

Deepika, H. D. (2012). Examining the relationship between emotional intelligence and transformational leadership in the work and family domains: An empirical study. *Journal of Organization and Human Behaviour*, *1*(4), 21-30.

Goleman, D. (1995). *Emotional intelligence.* Bantam Books, New York, NY.

Goleman, D. (1998). *Working with emotional intelligence.* Bantam Books, New York, NY.

Gupta, V., & Devalina (2015). Role of positive emotions in organizational coping. *Journal of Organization and Human Behaviour, 4*(2&3), 52-61.

HRD Press (2012). Leadership effectiveness profile. Retrieved from: http://www.hrdpress.com/LEPOL?sc=2&category=28534

Jyothirmani, M. K., Satish Kumar, R., & Soudamani, T. (2020). The role of personal competencies to reinforce emotional intelligence: An empirical study. *Our Heritage*, *6*(1), 161-172.

Kailola, L. G. (2019). Transformational leadership and emotional intelligence. *Advances in Social Sciences, Education and Humanities Research*, *401,* 210-212.

Khosravi, P., Ashkanary, N. M., & Rezvani, A. (2019). Emotional intelligence: A preventive strategy to manage destructive influence of conflict in large scale projects. *International Journal of Project Management, 38*(1), 36-46.

Kumari, S., & Rastogi, R. (2017). Impact of psychological capital on organizational effectiveness: Role of positive psychology at work. *Journal of Organization and Human Behaviour, 6*(1&2), 1-9.

Miao, C., Humphrey, R. H., & Shanshan, Q. (2017). A meta-analysis of emotional intelligence and work attitudes. *Journal of Occupational and Organizational Psychology*, *90,* 177-202.

Masa'deh, R. (2016). The role of emotional intelligence in enhancing organizational effectiveness: The case of information technology managers in Jordan. *International Journal of Communications, Network and System Sciences*, *9,* 234-249. Retrieved from http://dx.doi.org/10.4236/ijcns.2016.96022

Mayer, J. D., Salovey, P., & Caruso, D. R. (1997). *The emotional IQ test.* Needham, M.A. Virtual Knowledge.

Mukundam Smarty, P., & Zakkariya, K. A. (2018). Gender role identity and conflict management styles of managers in the service sector. *Journal of Organization and Human Behaviour, 7*(1), 11-19.

Nkeobuna, J. N. U. (2019). Management by Emotional intelligence and why it matters in organizational excellence. *American Journal of Marketing Research*, *5*(4), 42-53.

Petrides, K. V., & Furnham, A. (2006). The role of trait emotional intelligence in a gender-specific model of organizational variables. *Journal of Applied Social Psychology*, *36*(2), 552-569. Retrieved from http://dx.doi.org/10.1111/j.0021-9029.2006.00019.x

Petrides, K.V., Pita, R., & Kokkinaki, F. (2007). The location of trait emotional intelligence in personality factor space. *British Journal of Psychology*, *98,* 273-89.

Pooja, V. A. (2019). Occupational stress: Relationship with emotional intelligence and coping self-efficacy. *Journal of Organization and Human Behaviour*, *8*(1), 33-39.

Priya, S. M. (2016). Impact of emotional intelligence on organizational climate: A study of Indian insurance organizations. *International Journal of Scientific and Engineering Research*, *7*(7), 828-839.

Priyan, D., Sehrawat, A., & Sharma, T. (2016). Relationship between emotional intelligence and job performance: A study in Indian context. *Indian Journal of Science and Technology*, *9*(47), 1-12. doi:10.17485/ijst/2016/v9i47/103064

Rahim, M. A. (2001). *Managing conflict in organizations* (3rd ed.). Quorum Books, Westport, CT.

Ramesh, P. (2017). Emotional intelligence and perceived stress among scientists in agricultural research service. *The IUP Journal of Organizational Behavior*, *16*(2), 70-79.

Rathi, N., & Renu, R. (2008). Job satisfaction and psychological wellbeing. *The ICFAI Journal of Organizational Behavior*, *7*(3), 47-57.

Rezvani, H. R., & Hashemi, M. (2018). The relationship between emotional intelligence and organizational commitment among employees of governmental organizations affiliated subgroups Tehran municipality. *European Journal of Management and Marketing Studies*, *3*(1), 109-120.

Rosete, D., & Joseph, C. (2007). Emotional intelligence and its relationship to workplace performance outcomes of leadership effectiveness. *Leadership and Organizational Development Journal*, *26*(5), 388-399.

Sakthivel, M. M. (2017). A study on the impact of emotional intelligence of employees on organizational effectiveness in IT industry with special reference to Chennai city. *International Journal of Research in Social Sciences, 7*(2), 92-100.

Salovey, P., Mayer, J., & Caruso, D. (2004). Emotional intelligence: Theory, findings and implications. *Psychological Inquiry, 15,* 197-215.

Sarangi, S., & Aakanksha, V. (2015). Role of emotional intelligence on employee engagement: A study among Indian professionals. *International Journal of Business and Management*, *10*(6), 224-233.

Seyal, A. H., & Afzaal, T. (2013). An investigation of relationship among emotional intelligence, organizational commitment and job satisfaction: Evidence from academics in Brunei Darussalam. *International Business Research*, *6*(3), 217. Retrieved from http://dx.doi.org/10.5539/ibr.v6n3p217

Shafiq, M., & Rana, A. R. (2016). Relationship of emotional intelligence to organizational commitment of college teachers in Pakistan. *Eurasian Journal of Educational Research*, *62,* 1-14. Retrieved from http://dx.doi.org/10.14689/ejer.2016.62.1

Sharma, E. (2011). *Emotional intelligence test (EIT)*. Prasad Psycho Corporation, New Delhi, India.

Sharma, T., & Sehrawat, A. (2014). Emotional intelligence and conflict management: An empirical study in Indian context. *International Journal of Engineering, Business and Enterprise Applications*, *7*(1), 104-108.

Singh, S. K. (2007). Emotional intelligence and organizational leadership: A gender study in Indian context. *International Journal of Indian Culture and Business Management*, *1*(2), 48-63.

Singhal, T. K., Garg, B., & Saxena, D. (2014). Organizational productivity through emotional intelligence. *Pranjana: The Journal of Management Awareness*, *17*(1), 47-55.

Srivastava, K. (2013). Emotional intelligence and organizational effectiveness. *Industrial Psychiatry Journal, 22*(2), 97-99.

Stubbs, K. E., & Wolff, S. (2008). Emotional intelligence competencies in the team and team leader: A multi-level examination of the impact of emotional intelligence on team performance. *Journal of Management Development, 27*(1), 55-75.

Subramanian, K. R. (2016). Key to organizational effectiveness: Social and emotional intelligence. *International Research Journal of Advanced Engineering and Science*, *1*(4), 127-131.

Tahir, R. N., Alhaidan, H., & Sabir, S. (2019). Role of emotionally intelligent workers for organizational effectiveness. *Amazonia Investiga*, *8*(19), 669-678.

Thomas, K. W., & Kilmann, R. H. (1974). *The Thomas-Kilmann conflict mode instrument.* Xicom Inc., Tuxedo Park, N.Y.

Thomas, K. W., & Kilmann, R. H. (2010). *Thomas-Kilmann conflict mode instrument*. Profile and Interpretive Report. CPP Inc., NY.

University of South Australia. (2011). Teamwork skills questionnaire. Handout in Working in Teams. Online Workshop. Retrieved from http://careerscbc.yolasite.com/resources/Team%20work%20skills%20questionnaire%20C.pdf

Walia, P., & Paramjit, K. T. (2014). Emotional intelligence and occupational stress of college teachers. *Journal of Organization and Human Behaviour*, *3*(1), 33-39.

Zorana, I., Julia, M., Jochen, M., & Marc, B. (2020). Supervisor emotionally intelligent behavior and employee creativity. *Journal of Creative Behavior*, 1-3 @ Creative Education Foundation. doi:10.1002/Jocb.436