STUDY OF EMOTIONAL INTELLIGENCE AMONG UNIVERSITY STUDENTS: PERSONAL AND SOCIAL COMPETENCE

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ABSTRACT

The research on Artificial Intelligence (AI) with Emotional Intelligence (EI) issues and associated challenges is fast coming up as an emerging area of research. The current research and development activities on AI based systems lacks the emotional aspects of human intelligence. Therefore, all the emotional issues are to be incorporated in future artificial intelligence based systems. In this paper, we have studied the emotional intelligence among the university students of different School of Studies. The issues related to personal competence consisting of self-awareness, self-regulation and self-motivation) and social competence consisting of social awareness and social skills have been discussed. A sample of 100 students (70 males and 30 females) drawn from 6 School of Studies has been considered. A questionnaire consisting of 25 questions was prepared and mailed to the students. The data collected was analysed. It was found that three parameters namely building bonds, collaboration and cooperation and team capabilities, the students have highest emotions (100%) whereas for remaining five components, the emotions were also high (80%). We also observed that level of emotional intelligence increases with the age. In our study, we did not observe any significant difference in the level of emotional intelligence between male and female students.

Indexing Terms: Artificial Intelligence, Emotional Intelligence, Personal Competence, Social Competence

INTRODUCTION

AI is fast expanding and is not only limited by learning algorithms, but also is capable of considering deeper levels of human consciousness. In recent times, AI has been able to include several important components like the recognition of pattern and voice, identification of face and machine learning. However, AI should be able to include various emotions like surprise, happiness, anger, impatience, disappointment, frustration etc. Human emotions are deeply associated with several parameters such as motivations, intelligence, awareness, character, decision, evaluation, learning, desires etc.

It has been recognised that it is the self-awareness which is the significance of the mental activities of a human being. Therefore, emotional intelligence has to be one of the core ideas of AI with emotional intelligence. It is the Emotional Intelligence which separates us from the machines. The functions of emotional intelligence are defined in Fig. 1.
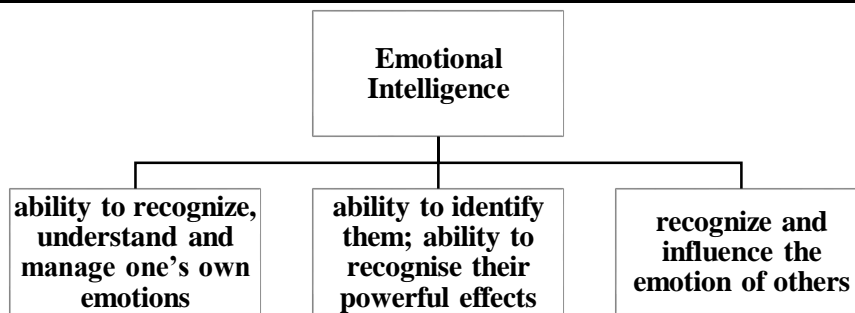
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                        ┌─────────────────┐
                        │    Emotional    │
                        │  Intelligence   │
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        ┌───────────────────────┼───────────────────────┐
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│ ability to        │ │ ability to        │ │ recognize and     │
│ recognize,        │ │ identify them;    │ │ influence the     │
│ understand and    │ │ ability to        │ │ emotion of others │
│ manage one's own  │ │ recognise their   │ │                   │
│ emotions          │ │ powerful effects  │ │                   │
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Fig. 1: Functions of Human Emotions

Thus, the recognition and understanding of human emotions is of paramount importance for artificial emotional intelligence systems not only to behave in most appropriate ways according to the situation but also smoothly integrate with all the different aspects of human life.

The Emotional Intelligence (EI) can be understood based on personal competence, social competence and technical competences. In personal competence, we consider self-awareness, self-regulation and self-motivation (Table 1) while in social competence, we consider social awareness and social skills (Table 2). The technical competence consists of four factors namely reading people, using emotions, understanding emotions and managing emotions which will be studied in the subsequent paper.

EI is now emerging a strong research area because it helps individuals to achieve the life quality to make them successful. The studies focused on measurement of EI level have been increasing day by day. EI literature reveals that the researches are mainly focused on students oriented towards impact of emotional intelligence on success.

Table 1: Emotional Intelligence (Personal Competence)

PERSONAL COMPETENCE		
1. Self-Awareness	**2. Self-Awareness**	**3. Self- Motivation**
Emotional Awareness: Recognizing one's emotions and their effects **Accurate Self-Assessment:** Knowing one's strengths and limits **Self-Confidence:** Sureness about one's self-worth and capabilities	**Self-Control:** Managing disruptive emotions and impulses **Trustworthiness:** Maintaining standards of honesty and integrity **Conscientiousness:** Taking responsibility for personal performance **Adaptability:** Flexibility in handling change **Innovativeness:** Being comfortable with and open to novel ideas and new information	**Achievement Drive**: Striving to improve or meet a standard of excellence **Commitment:** Aligning with the goals of the group or organization **Initiative:** Readiness to act on opportunities **Optimism:** Persistence in pursuing goals despite obstacles and setbacks

Table 2: Emotional Intelligence (Social Competence)

SOCIAL COMPETENCE	
1. Social Awareness	**2. Social Skills**
Empathy: Sensing others' feelings and perspective, and taking an active interest in their concerns **Service Orientation**: Anticipating, recognizing, and meeting customers' needs **Developing Others:** Sensing what others need in order to develop, and bolstering their abilities **Leveraging Diversity**: Cultivating opportunities through diverse people **Political Awareness**: Reading a group's emotional currents and power relationships	**Influence:** Wielding effective tactics for persuasion **Communication:** Sending clear and convincing messages **Leadership:** Inspiring and guiding groups and people **Change Catalyst:** Initiating or managing change **Conflict Management**: Negotiating and resolving disagreements **Building Bonds**: Nurturing instrumental relationships **Collaboration and Cooperation**: Working with others toward shared goals **Team Capabilities**: Creating group synergy in pursuing collective goals

These studies revealed that emotional intelligence is required to explain success. Along with the effects of emotional intelligence on the individual, characteristics and environment of an individual also have determinative role on emotional intelligence. The fact that development of emotional intelligence is a lifetime process, determining the effect of education on development of emotional intelligence becomes important. In this context, it is crucial to determine whether or not there is a difference between emotional intelligences of students studying at different disciplines and different Schools of Studies.

Emotions are involved in every activity, action and reaction of human being. Emotionally intelligent people are able to recognize their potentialities and they exercise this in their personal and professional life. In the span of last twenty year, emotional intelligence concept has become very popular parameter.

There are studies which reveal that there is a relationship or there are differences between sex, department students study at, social, economic and demographic conditions and emotional intelligence of students whereas some researches do not suggest a relationship or difference. Use of emotions is the ability to use emotions for facilitating cognitive activities such as thinking and problem solving. Understanding emotions is the ability to comprehend the language of emotions and to understand the complex relationships between emotions.

Now it is being considered widely that emotional intelligence is also required for the job satisfaction, motivation, decision taking in adverse situations etc. It is felt now that inclusion of emotional intelligence in higher education is needed because it will makes students able to reduce their academic pressure and in becoming a better decision maker. Emotional intelligence is not only useful for their academic life but also useful for post academic life.

Management of emotions means the ability of managing own emotions and others' emotions. (Salovey and Grewal 2005). The abilities of knowing oneself (self-consciousness), self-management, motivation, social skills and communication skills are important for emotional intelligence.

- **Self-consciousness** is explained as one's deeper understanding of own emotions, powers, weaknesses, needs and awareness of self-existence.
- **Self- management** is the liberation from being slave of one's emotions, namely directing the emotions as desired
- **Motivation** is going beyond expectations and not losing the feeling of success even in hard times
- **Social skill** is the ability to establish relationships with other individuals and to ensure sustainability of such relationships, creating and managing a team
- **Communication skill** is the ability of expressing yourself clearly and entirely as well as listening to the others attentively and fully, accurately understanding what they say

There are several definitions available in the literature for EI. Some of them are:

- Tucker et. al. (2000) : Emotional Intelligence is a combination of both intrapersonal intelligence (introvert intelligence) and interpersonal skills.
- Seal et. al. (2010): Emotional intelligence is described as overlapping of emotions and intelligence or briefly as emotions using intelligence
- Mehta and Singh (2013): Emotional intelligence (EI) refers to the ability to perceive, control and evaluate emotions

Daniel Goleman (1998, 2001) and Mehta and Singh (2013) have developed a framework of five elements that define emotional intelligence as Self-Awareness, Self-Regulation, Motivation, Empathy and Social Skills.

LITERATURE REVIEW

Ravi Kant (2019) studied the emotional intelligence among the university students to find the difference between EI on the basis of gender, locality, level of course and school of study. This survey based study used data from 200 students of a Central University. UG and PG students of were found not significantly differ from each other on Emotional intelligence.

Sharma (2014) studied the relationship between environmental awareness and emotional intelligence of student-teachers and teachers. The results showed that there was no significant difference between male and female student-teachers and teachers regarding environmental awareness and emotional intelligence.

Kumar and Singh (2018a,b) and Kumar et. al. (2018c,d) have extensively studied the influence of emotional perception in artificial intelligence, emotional intelligence for artificial intelligence, emotionally motivated artificial intelligence, emotional intelligence issues among the students of different background.

The impact of emotional intelligence on the academic achievement of students, different experts and researchers presented several views about the relationship between the two. (Vernon et al.,2008; Panboli and Gopu, 2011) observed significant correlation between main components of emotional intelligence including self-motivation, self-awareness, self-regulation, social consciousness, social skills and students' academic achievement. There are several studies which have noticed positive correlation between EI and academic performance (Vernon et al. (2008) ; Abdullah et. al.(2011).

Many authors have investigated the relationship of self and other ratings of emotional intelligence (Van Der Zee et. al. 2002) and concluded that the emotional intelligence dimensions were able to predict both academic and social success above traditional indicators of academic intelligence and personality. Researches have been conducted to know whether emotional intelligence plays a prominent role in overcoming stress and stress related outcomes (Kauts and Saroj,2010; Chabungban, 2005). Kauts and Saroj (2010) noticed emotional intelligence to be a factor useful in reducing occupational stress of teachers and enhancing their effectiveness in teaching.

Ayoko et. al. (2008) suggested that teams with less well-defined emotional intelligence climates were associated with increased task and relationship conflict and increased conflict intensity. Godse and Thingujam (2010), Jordan and Troth (2004) suggested different problems expect different styles of handling and emotionally intelligent individuals are capable of applying the different and better style of conflict management styles as the situation demands. Lenaghan et. al. (2007) revealed that employees who score high in emotional intelligence are more able to balance work-family conflict as they recognize and manage feelings of conflict as they occur. Boyatzis and Ratti

(2009) in their study identified competencies that differentiated effective managers and leaders. Results suggested that emotional, social and cognitive intelligence competencies predict performance.

Ahmed (2015) developed a simple and easy to understand model of EI: the synergy model. This study suggests that EI is the synergy present in intelligence, where total intelligence is the sum of the intelligence quotient, emotional quotient, and unexplained quotient. The model shows three possible outcomes of emotional intelligence. It also suggests that the best way to understand and measure the impact of emotional intelligence is to listen, observe, and feel it.

Rodrigues et. al. (2014) explored the role of EI on individual ethics, perceptions of other's ethics and ethics perception in facilitating success. EI predicted perceptions of the role of ethics in success. The role of EI was attested as a predictor in individual ethics, and the predictor role of these two in perceptions of other's ethics. EI was significantly correlated with self-esteem, social desirability, individual ethics and perceptions of other's ethics.

Nazan Yelkikalan et. al. (2012) studied the emotional intelligence levels of university students in the context of emotional intelligence extents; the difference in terms of demographic qualities of students and the majors they study and the relationship between emotional intelligence of students and their academic achievements. The results of the research revealed that there is not any significant difference in the relationship between the faculty of students and their emotional intelligence, apart from the sociability.

Grehan et. al. (2011) studied the relationship between individual characteristics and emotional intelligence of postgraduate students in the classroom and in the field. For such a measurement, they considered the grade average of students and assessment of apprenticeship supervisor regarding student's performance as indicators of achievement. It was revealed that there is a significant relationship between emotional intelligence, grade average and apprenticeship achievements.

Landau and Meirovich (2011) studied the role of participatory classroom environment over emotional intelligence of business management postgraduate students and whether or not emotional intelligence is related with academic achievements. The findings revealed that the chance of participating has a positive relationship with emotional intelligence of male students whereas not associated with emotional intelligence of female students. They also concluded that a supportive environment has positive relationship with emotional intelligence.

Tariq et. al. (2011) researched on the emotional intelligence of university students for the purpose of explaining self-perception status of students in terms of different factors of emotional intelligence, comparing female and male students and establishing a relationship between the academic achievements and perceived emotional intelligence. The results confirmed that university students are highly aware of self-reports. Although there is a great difference between perceptions of female and male students, male students believe that they are more superior in factors of emotional intelligence, compared to the female students. Furthermore, the conclusions did not reveal a relationship between students' emotional intelligence and academic achievements.

Sanchez-Ruiz et. al. (2010) researched on emotional intelligence of university students studying at five different faculties, namely Technical, Natural Sciences, Social Sciences, Art and Human Sciences. The following were the hypothesis of study conducted by using emotional intelligence scale:

- In terms of emotionality, Social Sciences will get a higher score than Technical Education,
- In terms of emotionality, Fine Arts will get a higher score than Technical Education,
- Fine Arts will get a lower self-control score than Technical Education,
- There will be an interaction between sex and faculty, in order words, only in social sciences the female students will have higher scores than male students.

Zakarevicius and Zuperka (2010) determined the impact of emotional intelligence factors such as self-awareness, self-control, social self-awareness on relations management for development of entrepreneurism aspect of business administration students. The study concluded that the relationships between individual characteristics and emotional intelligences of an individual are highly important for development of personal capacity.

METHODOLOGY OF RESEARCH

The model of emotional intelligence has two personal competence and social competences with sub branches. A total of 25 questions were placed in the questionnaire. The concept is given in Table 1 and Table 2. The factors on the scale are as follows; self-awareness, self-regulation, self- motivation, social awareness, and social skills. All questions are answered by using Likert scale 1 – Strongly Disagree, 2- Disagree, 3 - Undecided ,4 – Agree, 5- Strongly Agree.

SAMPLING AND DATA COLLECTION

The Schools of Applied Sciences, Engineering, Agriculture, Management and Commerce, Pharmacy were included in the research. The students numbers chosen for the research are given in Table 3. "Questionnaire method" was used as the data collection method. The questionnaire form having only closed ended questions were filled in. The sample consists of 100 students (70 Males and 30 Females).

Table 3: The Faculty Members and Students involved in the Study

Schools of Studies	Students		Total
	Male	Female	
Computer Science and Engineering	20	5	25
Mechanical Engineering	10	5	15
Electrical Engineering	10	5	15
Management and Commerce	10	5	15
Education and Teacher Training	10	5	15
Applied Sciences	10	5	15
Total	70	30	100

DATA ANALYSIS AND FINDINGS

The internal consistency of the scale was measured in order to determine the reliability of the scale used in the research. The reliability coefficient of the scale used in this research was 0.949. A reliability coefficient greater than 0.70 confirms that the scale used in the study is reliable (Hair et al., 2006).

RESULTS AND DISCUSSION

1. Self-Awareness

The variation of emotional awareness is shown in Fig. 2. It is seen that 40% of the respondents were highly emotional in recognising one's emotions and their effects. This may be due to the fact that emotional intelligence is not taught in any subject. The variation of self-awareness is shown in Fig 3. Here 60% of the students are aware of knowing one's strengths and weaknesses. 20% students could not decide about this meaning thereby that these were not clear in emotional awareness. The variation of self-confidence is shown in Fig 4. Here also 60% of the students are aware of knowing one's self worth and capabilities. 40% students could not decide about this.
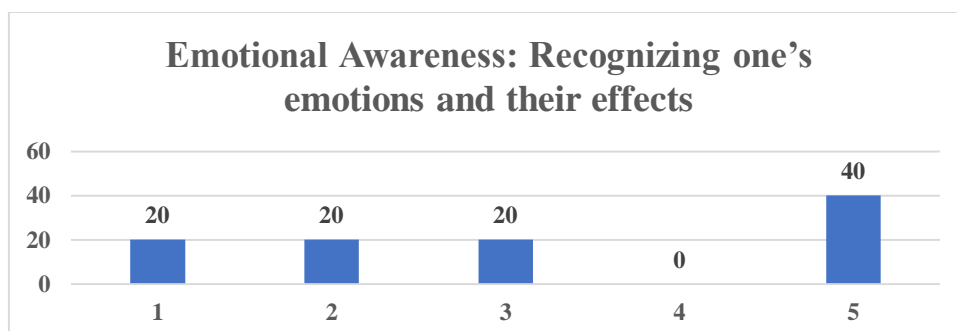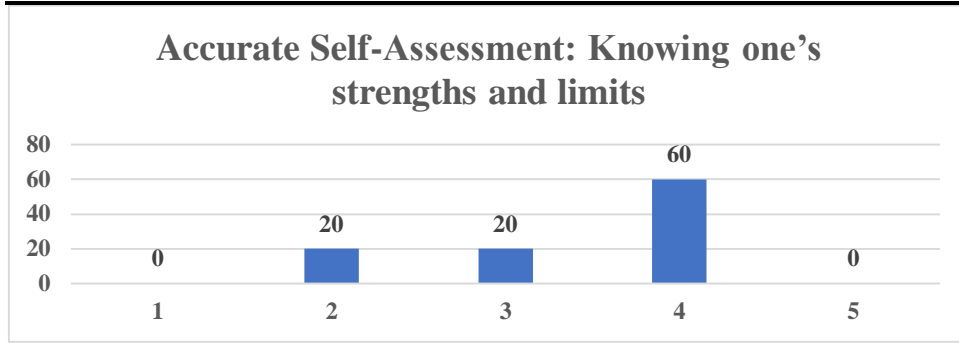

Fig. 2: Variation of Emotional Awareness

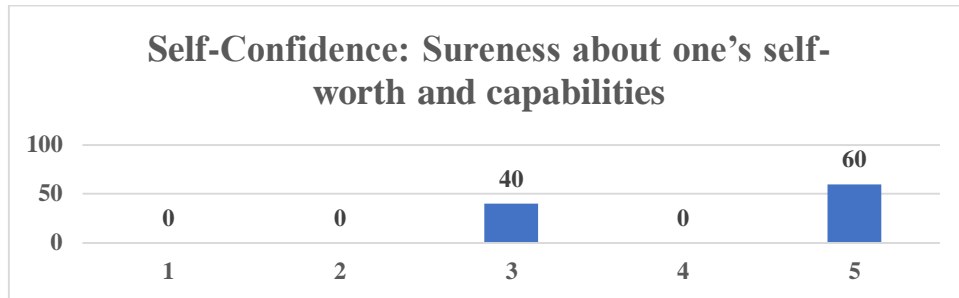**Fig.3: Variation of Self-assessment**

Fig. 4: Variation of Self-confidence

2. Self-Regulation

In self-regulation, we considered self-control, trustworthiness, conscientiousness, adaptability and innovativeness. The self-control means managing disruptive emotions and impulses. The trustworthiness means maintaining standards of honesty and integrity. The conscientiousness means taking responsibility for personal performance. The adaptability means flexibility in handling change. The innovativeness means being comfortable with and open to novel ideas and new information

The results are shown in Figs. 5-9 respectively. It can be seen that 80% or even more students have strong emotions for all these factors. Foe innovativeness, 90% students were having strong emotions.

Fig. 5: Variation of Self-control
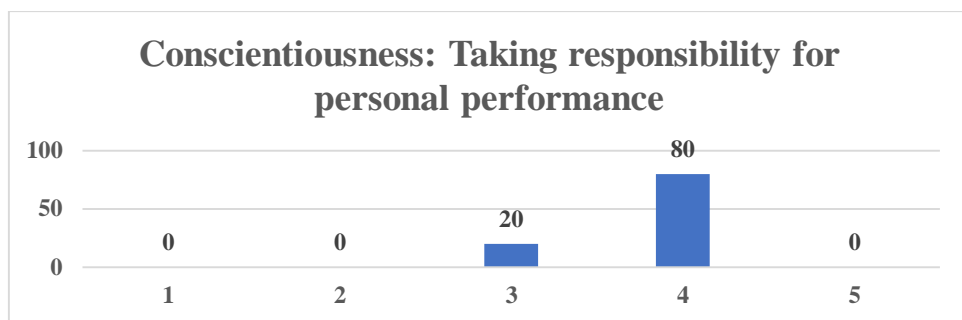

Fig. 6: Variation of Trustworthiness

Conscientiousness: Taking responsibility for personal performance

Fig. 7: Variation of Conscientiousness

Adaptability: Flexibility in handling change

Fig.8: Variation of Adaptability

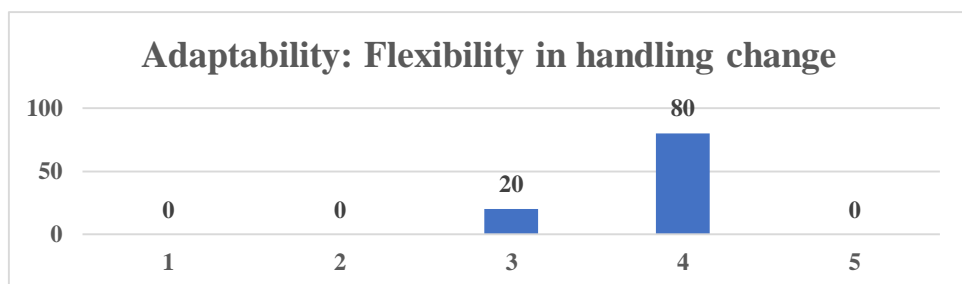**Innovativeness: Being comfortable with and open to novel ideas and new information**

Fig. 9: Variation of Innovativeness

3. Self- Motivation

In self-motivation, we considered achievement drive meaning striving to improve or meet a standard of excellence; the commitment meaning aligning with the goals of the group or organization; initiative meaning readiness to act on opportunities and optimism meaning persistence in pursuing goals despite obstacles and setbacks. The results are shown in Figs. 10-13 respectively. It can be seen that 80% students have strong emotions for all these factors.
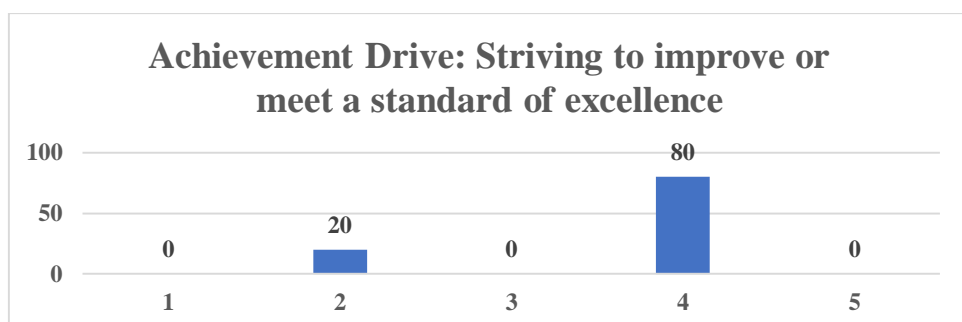
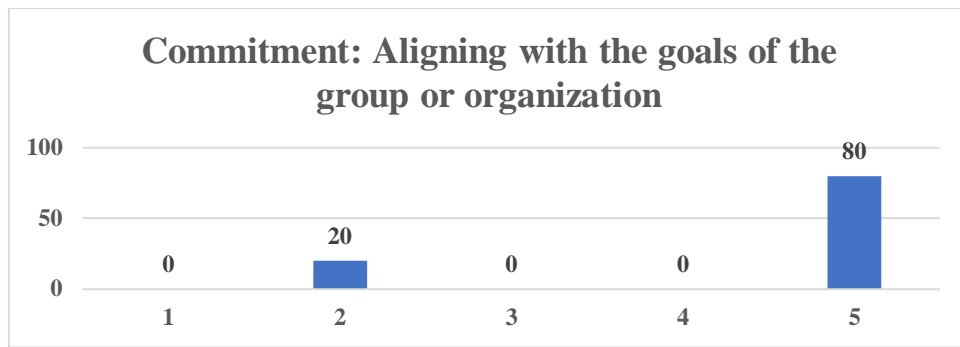**Achievement Drive: Striving to improve or meet a standard of excellence**

Fig. 10: Variation of Achievement

Fig. 11: Variation of Commitment

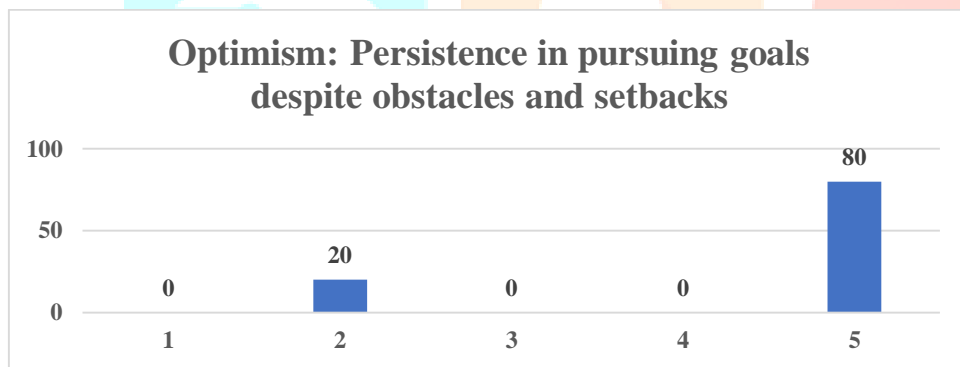

Fig. 12: Variation of Initiative

Fig. 13: Variation of Optimism

B.SOCIAL COMPETENCE

1. Social Awareness

The social awareness consists of following five components:

1) Empathy meaning sensing others' feelings and perspective, and taking an active interest in their concerns
2) Service Orientation meaning anticipating, recognizing, and meeting customers' needs
3) Developing Others meaning sensing what others need in order to develop, and bolstering their abilities
4) Leveraging Diversity meaning cultivating opportunities through diverse people
5) Political Awareness meaning reading a group's emotional currents and power relationships

The results are shown in Fig. 14-18 respectively. It can be seen that 80% students have strong emotions for all the factors pertaining to social awareness.
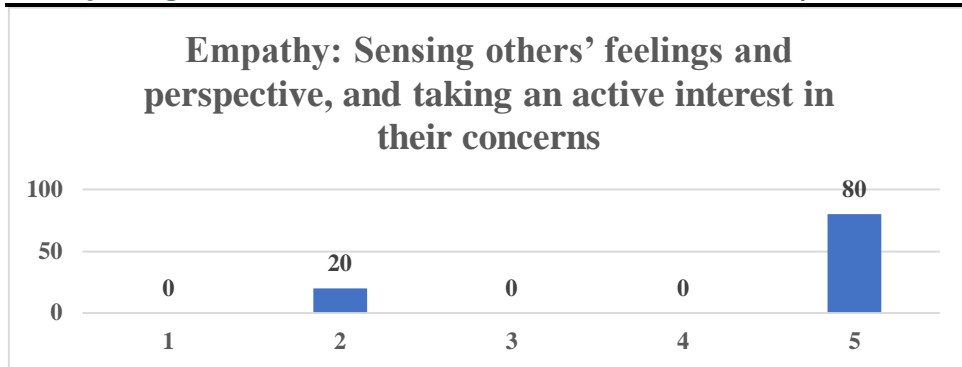
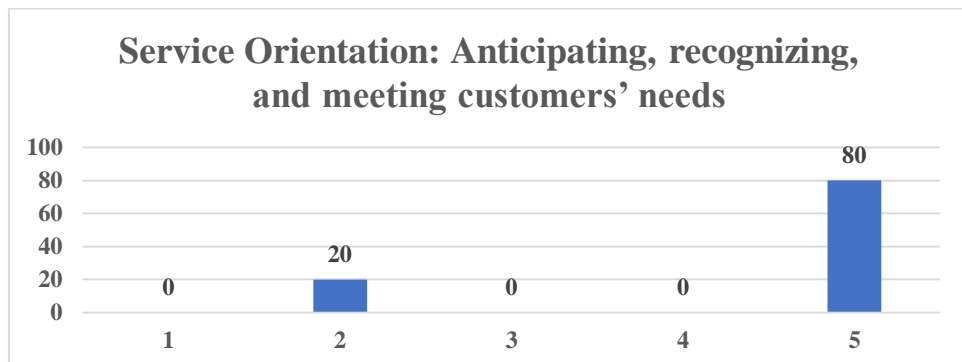**Empathy: Sensing others' feelings and perspective, and taking an active interest in their concerns**

Fig. 14: Variation of Empathy

Service Orientation: Anticipating, recognizing, and meeting customers' needs

Fig. 15: Variation of Service Orientation

Developing Others: Sensing what others need in order to develop, and bolstering their abilities

Fig. 16: Variation of Developing Others

Leveraging Diversity: Cultivating opportunities through diverse people
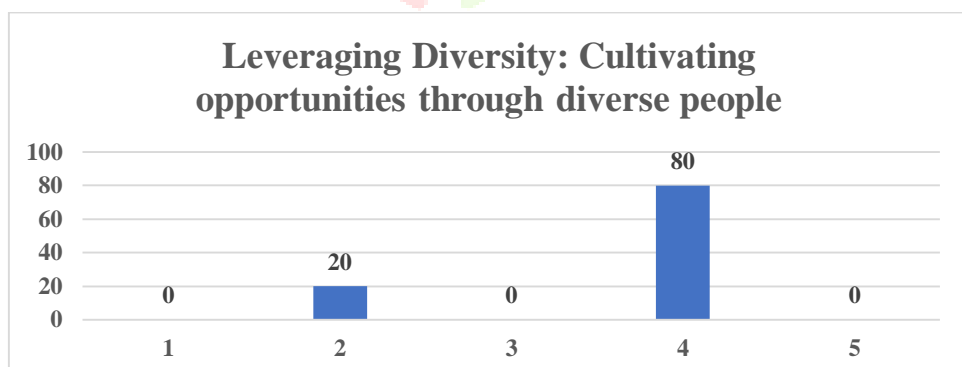

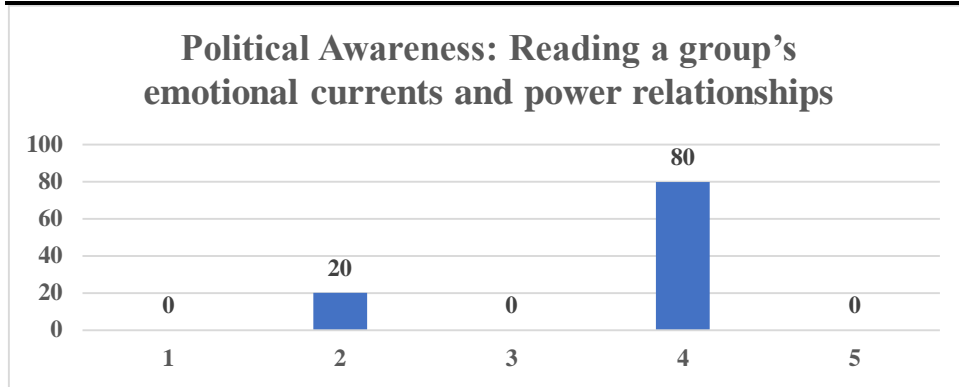**Fig. 17: Variation of Leveraging Diversity**

Fig. 18: Variation of Political Awareness

2. Social Skills

In social skills, we examined following options:

1) Influence: Wielding effective tactics for persuasion
2) Communication: Sending clear and convincing messages
3) Leadership: Inspiring and guiding groups and people
4) Change Catalyst: Initiating or managing change
5) Conflict Management: Negotiating and resolving disagreements
6) Building Bonds: Nurturing instrumental relationships
7) Collaboration and Cooperation: Working with others toward shared goals
8) Team Capabilities: Creating group synergy in pursuing collective goals

The results are shown in Fig. 19. The results are very interesting. The three parameters namely building bonds, collaboration and cooperation and team capabilities, the students have highest emotions (100%) whereas for remaining five components, the emotions were also high (80%).
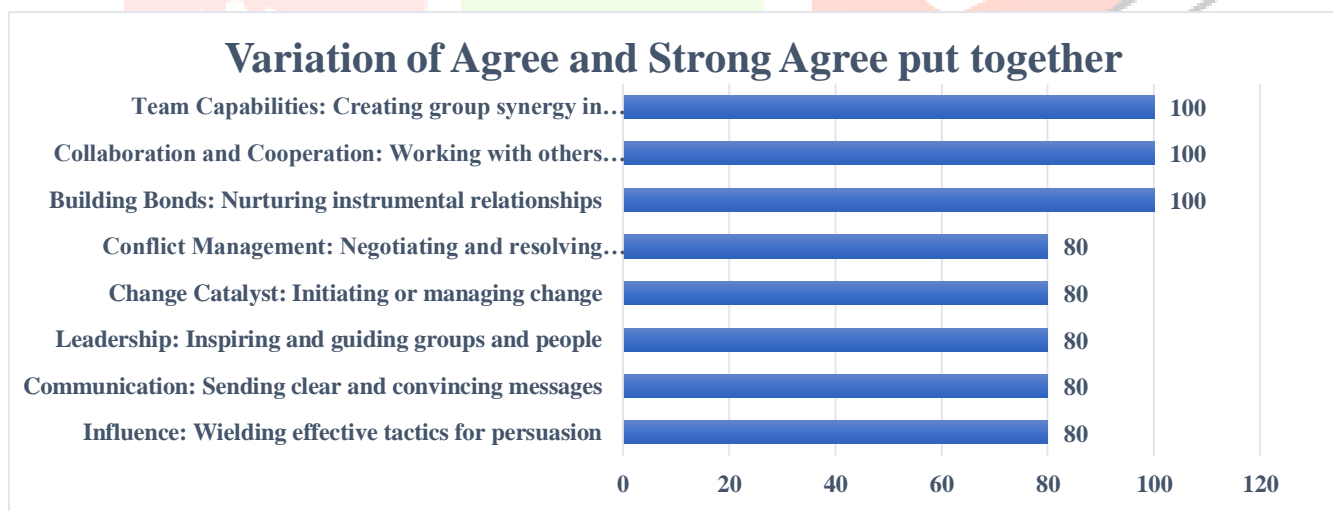

Fig. 19: Variation of Social Skills

In our study, all the students were of higher age, perusing either graduation or masters degree. When we observed the emotional intelligence between graduate and masters degree pursuing students, we observed that level of emotional intelligence increases with the age, as observed earlier also by the researchers. In our study, we did not observe any significant difference in the level of emotional intelligence between male and female students. This finding was in agreement with Sanchez-Ruiz, Perez-Gonzalez and Petrides (2010) where they highlighted that sex does not create a significant difference and women have a higher level of emotional intelligence only in social sciences.

Landau and Meirovich (2011) have concluded that there is not any relationship between emotional intelligence of students and their academic achievements. We have also observed similar trends as seen from Fig. 19.

CONCLUSION

The importance of emotional intelligence is gradually increasing with number of studies. We have studied the emotional intelligence level of university students. The data from students studying at six different School of Studies was collected by using a questionnaire having 25 questions. The results are very interesting. The three parameters namely building bonds, collaboration and cooperation and team capabilities, the students have highest emotions (100%) whereas for remaining five components, the emotions were also high (80%). In our study, all the students were of higher age, perusing either graduation or master's degree. When we observed the emotional intelligence between graduate and master's degree pursuing students, we observed that level of emotional intelligence increases with the age. In our study, we did not observe any significant difference in the level of emotional intelligence between male and female students.

REFERENCES

Ahmed, M. R. (2013). Emotional Intelligence Is Feeling, Observing, and Listening. http://www.huizenga.nova.edu/faculty-blog/index.cfm/2013/7/1

Ahmed, M. R. (2014a). Use Emotional Intelligence to Succeed at the Workplace. http://url.ie/sr98

Ahmed, M. R. (2014b). Emotional Intelligence Is Synergy in Intelligence. http://meeting.aom.org/news/746

Ahmed, M. (2015). Emotional Intelligence Is Synergy in Intelligence. *Psychology, 6,* 447-455.

Ahmed, M. R. (2010a). Emotional Intelligence Model for Managers. HRM Review, X, October, 34-37.

Aunkumar, J. (2012) A Study on Assessment of Environmental Awareness among Teacher Trainees in Teacher Training Institutes. International Journal of Research in Social Sciences, 3, 312-321.

Abdullah, M.C., Elias, H., Mahyuddin, R., & Uli,J. (2004). Emotional intelligence and academic achievement among Malaysian secondary students. Human Resource Management Papers, Islamabad: National Institute of Psychology.

Ayoko, O. B., Callan, V. J., & Hartel, C. E. J. (2008). The Influence of Team Emotional Climate on Conflict and Team Members' Reactions to Conflict.Small Group Research, 39 (2), 121-149.

Boyatzis, R. E., & Ratti, F. (2009).Emotional, Social and Cognitive Intelligence Competencies Distinguishing Effective Italian Managers and Leaders in a Private Company and Cooperatives.Journal of Management Development,28 (9), 821-838.

Bar-On, R. (2000). Emotional and Social Intelligence: Insights from the Emotional Quotient Inventory (EQ-i). In R. Bar-On, & J. D. A. Parker (Eds.), Handbook of Emotional Intelligence (pp. 363-387). San Francisco, CA: Jossey-Bass.

Brackett, M.A. and J. D. Mayer, (2003), "Convergent, Discriminant, and Incremental Validity of Competing Measures of Emotional Intelligence," Personality and Social Psychology Bulletin, Vol. 29, No. 10, pp. 1-12.

Chabungham, Parmananda (2005). The Soft Art of Being a Tough Leader. Indian Management Journal, 82-84.

Dulewicz, V., & Higgs, M. (1999). Can Emotional Intelligence Be Measured and Developed? Leadership & Organization Development Journal, 20, 242-252. http://dx.doi.org/10.1108/01437739910287117

Fox and P. E. Spector,(2000), "Relations of Emotional Intelligence, Practical Intelligence, General Intelligence, and Trait Affectivity with Interview Outcomes: It's Not All 'G'," Journal of Organizational Behavior, Vol. 21, No. 2, 2000, pp. 203-220.

Gaudine, A and L. Thorne (2001), , "Emotion and Ethical Decision-Making in Organizations," Journal of Business Ethics, Vol. 31, No. 2, pp. 175-187.

Grehan P.M., Flanagan R. and. Malgady R. G. (2011). Successful Graduate Students: The Roles Of Personality Traits And Emotional Intelligence. Psychology In the Schools, 48, 4.

Goleman, D. (1998). Working with Emotional Intelligence. New York: Bantam

Goleman, D. (2001). Emotional intelligence: Issues in paradigm building. In C. Cherniss and D. Goleman (Ed's.), The Emotionally Intelligence Workplace. San Francisco: Jossey-Bass.

Godse, A. S., &Thingujam, N. S. (2010). Perceived Emotional Intelligence and Conflict Resolution Styles among Information Technology Professionals: Testing the Mediating Role of Personality.Singapore Management Review, 32 (1), 69-83.

Hair, F.J., Black, C.W., Babin, J.B., Anderson, E. R. and Totham, L.R. (2006). Multivariate Data Analysis. Pearson Printice Hall, Sixth Edition, New Jersey.

Ivcevic, Z, M. A. Brackett and J. D. Mayer,(2007), "Emotional Intelligence and Emotional Creativity," Journal of Personality, Vol. 75, No. 2, pp. 199-235.

Joseph, D.L. and D. A. Newman, (2010), "Emotional Intelligence: An Integrative Meta-analysis and Cascading Model," Journal of Applied Psychology, Vol. 95, No. 1, 2010, pp. 54-78.

Kauts, Amit., & Saroj , Richa.,(2010) Study of teacher effectiveness and occupational stress in relation to emotional intelligence.

Kumar Arvind and R. Singh (2018a): Emotionally Motivated Artificial Intelligence (EMAI) Model, International Journal of Advanced Research in Computer Science and Software Engineering, Vol. 8, Issue 7.

Kumar Arvind and R. Singh (2018b): Influence of Emotional Perception in Artificial Intelligence, International Journal of Advanced Research in Computer Science and Software Engineering, Vol. 8, Issue 7.

Kumar Arvind, Singh Rajiv and Ram Chandra (2018c): Emotional Intelligence for Artificial Intelligence: A Review, International Journal of Science and Research, Vol 7, Issue 8, pp. 479-487.

Kumar Arvind, Singh Rajiv and Ram Chandra (2018d): A Study of Emotional Intelligence Issues among the Students of Different Background, International Journal of Science and Research, Vol 7, Issue 8, pp. 870-874.

Kun, B. and Demetrovices, Z (2010), Emotional Intelligence and Addictions: A Systemic Review, Substance Use & Misuse, 45, pp. 1131-1160.

Landau J., Meirovich G. (2011). Development Of Students' Emotional Intelligence: Participative Classroom Environments In Higher Education. Academy of Educational Leadership Journal, 15, 3.

Landa, J. M. A. ; E. López-Zafra, R. M. D. Antoana and M. Pulido, (2006), "Perceived Emotional Intelligence and Life Satisfaction among University Teachers," Psicothema, Vol. 18, pp. 152-157.

Lenaghan, J. A., Buda, R., & Eisner, A. B. (2007). An Examination of the Role of Emotional Intelligence in Work and Family Conflict, Journal of Managerial Issues, 11 (1), 76-94.

Mayer, J. D; Salovey, P. and D. R. Caruso, (2004), "Emotional Intelligence: Theory, Findings, and Implications," Psychological Inquiry, Vol. 15, No. 3, pp. 197-215.

Maye, J.D. and P. Salovey,(1990), "Emotional Intelligence," Imagination, Cognition and Personality, Vol. 9, No. 3, pp. 185-211.

Mayer, D; P. Salovey, D. R. Caruso and G. Sitarenios, (2001), "Emotional Intelligence as a Satandard Intelligence," Emotion, Vol. 1, No. 3, pp. 232-242.

Mehta, S and Singh, N (2013), Development of Emotional Intelligence Scale, International J. Management & Informational Technology, Vol. 8, No.1, pp. 1252-1264.

Nazan Yelkikalan, Gungor Hacioglu, Abdullah Kiray, Bilal Ezilmez, Ergul Soylemezoglu, Hanife Cetin, Rukiye Sonmez and , Secil Özturk (2012) Emotional Intelligence Characteristics of Students Studying at Various Faculties and Colleges of Universities , European Scientific Journal, vol. 8, No.8

O'Connor Jr., Little, I, S.(2003). Revisiting The Predictive Validity of Emotional Intelligence: Self-Report Versus Ability-Based Measures. Personality and Individual Differences, 35, 893–1902.

Petrides, K.V. (2001). A Psychometric Investigation Into The Construct of Emotional Intelligence. Unpublished Doctoral Dissertation, University College London.

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, 552– 569.

Panboli, S., Gopu, J. (2011). The level of emotional intelligence of university students in Chennai, India, Proceedings for 2011 international research conference and Colloquium,144-159.

Ravi Kant (2019), Emotional intelligence: A study on university students, Journal of Education and Learning (EduLearn), Vol. 13, No. 4, November 2019, pp. 441~446

Rode, J., Mooney, C., Arthaud-Day, M., Near, J., Baldwin, T., Rubin, R. and Bommer, W. (2007). Emotional Intelligence And Individual Performance: Evidence of Direct and Moderated Effects. Journal of Organizational Behavior, 28, 399-421.

Rodrigues Cabral, Â. and Oliveira Carvalho, F. (2014) Emotional Intelligence and Ethics on Organizations. Open Journal of Business and Management, 2, 5-23.

Sharma, S. (2014), A Study of Environmental Awareness of Student Teachers and Teachers in Relation of Their Emotional Intelligence. *Open Journal of Social Sciences*, 2, 146-151.

Salovey P., Grewal D. (2010). The Science of Emotional Intelligence. Current Directions in Psychological Science, 14, 6,.282-285.

Sanchez-Ruiz M. J., Perez-Gonzalez J.C. and Petridez K.V. (2010). Trait Emotional Intelligence Profiles of Students From Different University Faculties. Australian Journal of Psychology, 62, 1, 51–57.

Seal, C. R., Stefanie E. N., Amy N. S. and Royce-Davis. J. (2010). Social Emotional Development: A New Model of Student Learning in Higher Education. Research in Higher Education Journal, 1-13.

Sternberg, R. J. (1997), "The Concept of Intelligence and Its Role in Lifelong Learning and Success," American Psychologist, Vol. 52, No. 10, pp. 1030-1037.

Schutte, N. S. ;J. M. Malouff, M. Simunek, J. McKenley and S. Hollander, (2002), "Characteristic Emotional Intelligence and Emotional Well-Being," Cognition and Emotion, Vol. 16, No. 6, 2002, pp. 769-785.

Solomon, R. C. (2000),"The Philosophy of Emotions," In: M. Lewis and J. M. Haviland-Jones, Eds., Handbook of emotions, Guilford Press, New York, 2000, pp. 3-15.

Tariq, S., Majoka, M.I. and Hussain S. (2011). A Study to Investigate Emotional Intelligence of Male and Female Students at University Level in Pakistani Context. Interdisciplinary Journal Of Contemporary Research In Business, 2, 10, 209-218.

Tucker, M. L., Sojka, Z.J. and Barone, F. J, McCarthy, A. M. (2000). Training Tomorrow's Leaders: Enhancing the Emotional Intelligence of Business Graduates. Journal of Education for Business, 75, 6, 331-337.

Van Der Zee, K., Thijs, M., & Schakel, L. (2002). The relationship of emotional intelligence with academic intelligence and the big five. European Journal of Personality, 16, 103-125.

Vernon,P.A., Petrides, K.V., Bratko. D., &Schermer, J.A. (2008). A behavioral genetic study of trait emotional intelligence. Emotion , 8 ,635-642.

Wong, C.S., Kenneth S. L. (2002). The Effects Of Leader And Follower Emotional Intelligence On Performance And Attitude: An Exploratory Study. The Leadership Quarterly, 13, 243–274.

Wong, C. S., Wong, P. M., Chau, S.L. (2001). Emotional Intelligence, Students' Attitudes Towards Life and The Attainment of Education Goals: An Exploratory Study in Hong Kong. New Horizons in Education, 44, 1 – 11.

Wong, C.S. and K. S. Law, (2002), "The Effects of Leader and Follower Emotional Intelligence on Performance and Attitude: An Exploratory Study," The Leadership Quarterly, Vol. 13, No. 3, 2002, pp. 243-274.

Zakarevicius, P., Zuperka, A, (2010). Expression of Emotional Intelligence in Development of Students' Entrepreneurship. Economics and Management, 15.