

Role of Emotional Intelligence Dimensions in Stress Detection



Sarika K.Swami, MuktaG. Dhopeshwarkar

Abstract: Emotional Intelligence plays a vital role in our day to day life. EI helps to manage our emotions in positive ways. The objective of the present research paper is to study all the Intra PA, Inter PA, Intra PM, Inter PM dimensions of gathered dataset regarding EI and its impact on stress detection. The goal of this paper is to make the gender smart comparative evaluation on nowadays society for this the dataset is created for the same by way of the usage of psychometric test via the statistical analysis on the identical self-created database it has been discovered that female should improve her EI Dimensions to overcome stress & by using t-test it proves that there may be a statistically huge difference between male and female close to normal strain however it can be different if there is another parameter is becoming a member of.

Keywords: EI, Inter PA, Inter PM, Intra PA, Intra PM, Mean, SD, Stress, t-test.

I. INTRODUCTION

The main purpose of this research paper is to examine the role of EI dimensions on stress detection. There are four main types of EI dimensions according to Dr. S.K.Mangaland Mrs.Shubra Mangal. If the people know their all EI dimensions regarding stress, they are able to know their weaker section of EI dimensions try to improve and manage their stress more efficiently. Our life schedule is a challenging in nature not for only employers or parents as well as their children’s also. If we talk about employers or parents they should managing the boundary between home and office and if we talk about students they should managing the boundary between home and school. This paper helps to gain knowledge about the how EI dimensions is effect on stress.

1.1. EI:

According to Daniel Goleman [7], the oldest centers of the human brain, those responsible for feelings, are also responsible for managing ourselves and our social skills. These are skills that are contained in the genetic development of people and serve for the survival and adaptation of mankind. The emotional part of the brain perceives the world differently than the reasonable part. This conclusion brings new perspective on an enormous gap between cognition and emotion.

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Some skills are just cognitive, such as analytical thinking and technical skills. Some of them are a mixture of combined parts between cognition and emotion; this is called emotional intelligence (Goleman, 2001, p. 18–36). Emotional intelligence can therefore be defined as the ability to recognize and adjust our emotions that trigger our responses with certain situations or people. We can learn how to gain control over our responses and actively participate in forming our social skills. Emotional intelligence – the ability to manage ourselves and our relationships – consists of four fundamental capabilities: self-awareness, self-management, social awareness, and social skill. Each capability, in turn, is composed of specific sets of competencies (Goleman, Boyatziss& McKee, 2002, 263–265).

EI defined as [8] “The ability to identify and manage one’s own emotions, as well as the emotions of others.”

1.2. Components of EI:

Depending on the model of EI used, there are generally five components to EI [8]:

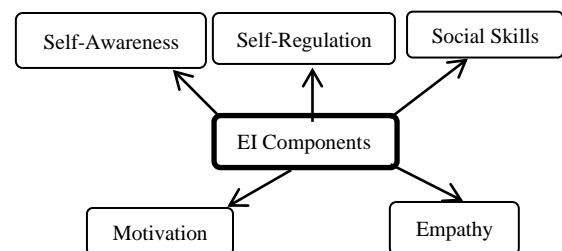


Figure 1: Components of EI

- Self-Awareness:** Knowing one's own feelings, qualities and weak points, values, drivers, and so on.
- Self-Regulation:** The capacity to control and adjust one's own feelings, motivations, and energies
- Social Skills:** The capacity to successfully oversee associations with social groups or people
- Motivation:** It is related to self-motivation towards the goal
- Empathy:** Taking the sentiments of others into thought, particularly in the thoughtful process

1.3. Dimensions of EI:

Following are the four main dimensions of EI

- Intra Personal Awareness (Intra PA)
- Inter Personal Awareness (Inter PA)
- Intra Personal Management (Intra PM)
- Inter Personal Management (Inter PM)



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- i. **Intra PA:** Here, you can accurately perceive your emotions and stay aware of them as they happen.
- ii. **Inter PA:** Here, you can accurately pick up on emotions in other people and understand what is going on.
- iii. **Intra PM:** In Intra PM, You can use awareness of your emotions to stay flexible and positively direct your behavior.
- iv. **Inter PM:** Here, you can use awareness of your emotions and the others emotions to manage interactions successfully.

Here, the Inter PA levels of interpretation of females the same as males, whereas in the other three dimensions of EI performance of males is better than female.

II. CREATION OF DATASET AND PRE-PROCESSING

For a collection of datasets, an online Google form became used. Google form protected the personal data fields like Name, Gender & Name of City. After collection of information records pre-processing is done for avoiding incomplete irrelevant or uncooked facts input, after that code is given to every dataset.

III. METHODOLOGY

Online dataset collection plays a vital role in this research so it saves a lot of time. The topics of the look consisted of a hundred and four subjects, wherein 55 male subjects and 49 females' subjects are included. For the gathering of all research associated facts for this research, Emotional Intelligence inventory is used. Emotional intelligence inventory has a hundred questions objects, 25 every from the 4 regions to be spoken back as "Positive" or "Negative". The mode of reaction to every object is both "positive" or "negative" indicating whole agreement or warfare of words with the proposed announcement. The device has both excessive exceptional and bad gadgets. For scoring one mark is supplied for the response indicating the presence of emotional intelligence and zero for the absence of emotional intelligence. The information has been analyzed with the perfect statistical measures to justify the targets of the research for that Mean, SD & t-test is used.

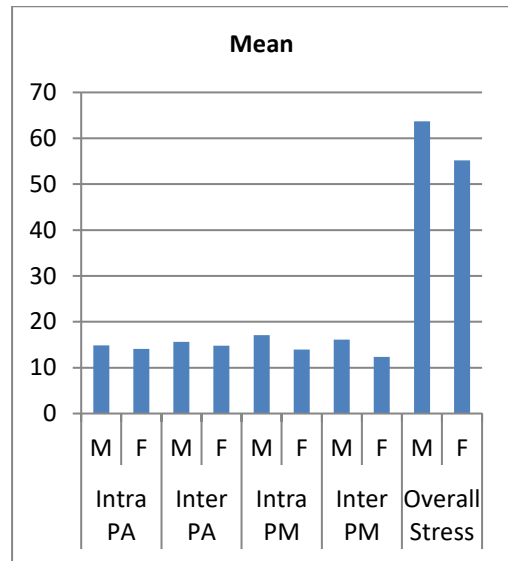
IV. ANALYSIS OF RESULT

4.1 Standard Norm table:

Sr. No.	EI Dimensions	Gender	Mean	Interpretation
1	Intra PA	Male	14.89	Poor
		Female	14.08	Poor
2	Inter PA	Male	15.60	Average
		Female	14.76	Average
3	Intra PM	Male	17.11	Average
		Female	13.98	Poor
4	Inter PM	Male	16.13	Average
		Female	12.37	Poor
5	Overall Stress	Male	63.73	Good
		Female	55.18	Average

Table 1: Standard Norm Table with Interpretation

Table1: Shows the Standard Norm table with its Interpretation level of EI Dimensions and Overall Stress.



Graph 1: Standard Norm table

Graph 1: Standard Norm table shows the graphical representation of the interpretation of EI Dimensions and Overall Stress and its resulted distribution in males and female.

4.2 Case processing summary:

Gender	Cases						
	Valid		Missing		Total		
	N	%	N	%	N	%	
Overall	Male	55	100%	0	0.0%	55	100%
Stress	Female	49	100%	0	0.0%	49	100%

Table 2: Case Processing Summary

Table 2: Case Processing Summary Shows that there are 104 datasets, from that 55 is male and 49 is female. There is no system and user-generated missing values

4.3 Test of Normality:

Overall Stress	Gender	Shapiro-Wilk		
		Statistic	df	Sig.
	Male	0.970	55	0.181
Female	0.983	49	0.674	

Table 3: Test of Normality

In the Test of Normality Table 3 shapiro-wilk test is considered it shows that the overall stress of male and female are normally distributed because the research data is normally distributed parametric statistical analysis used.

4.4t – Test:

	Gender	Mean	SD	t-value	Sig. at 0.05 Level
Intra PA	Male	14.89	4.215	1.266	0.209
	Female	14.08	2.050		
Inter PA	Male	15.60	3.504	1.375	0.172
	Female	14.76	2.750		
Intra PM	Male	17.11	3.089	5.516	0.000
	Female	13.98	2.696		
Inter PM	Male	16.13	3.647	6.862	0.000
	Female	12.37	1.692		
Overall Stress	Male	63.73	10.584	5.381	0.000
	Female	55.18	4.872		

Table 4: t-Test

Table 4: t – Test indicates the acquired mean & SD changed for Intra PA, Inter PA, Intra PM, Inter PM. The table shows that in all EI dimensions performance of males is good as compare to females and there is a significant difference.

V. CONCLUSION

The Interpretation Inter PA level of females same as male which is average so the female has to improve her other three dimensions of EI to overcome her stress level. The t-test is proved that there is a sizable difference among all EI Dimensions in genders. Female suffer own extra stress than the male because there may be a problem in family & office or both so they can't able to manage her EI dimensions and its effect on her stress so, we should support females and encourage them to leave stress-free life.

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REFERENCES

1. C.R. Kothari, "Research Methodology Methods and Techniques", NEWAGE INTERNATIONAL (P) LIMITED, PUBLISHERS, ISBN (13) : 978-81-224-2488-1.
2. Mangal, S. K., & Mangal, S. (2004).Manual for Mangal emotional intelligence inventory. Agra: National Psychological Corporation
3. Dhananjay B Vitalkar, "A comparative study of emotional intelligence between rural and urban Basketball players", International Journal of Physical Education, Sports and Health 2016; 3(2): 72-75.
4. Rahel Tajeddini," Emotional Intelligence and Self Esteem among Indian

and Foreign Students – (A Comparative Study)" International Journal of Humanities and Social Science Invention ,ISSN (Online): 2319 – 7722, ISSN (Print): 2319 – 7714 www.ijhssi.org Volume 3 Issue 6 | June. 2014| PP.16-25.

5. Uzma Hanif Gondal and Tajammal Husain, "A Comparative Study of Intelligence Quotient and Emotional Intelligence: Effect on Employees' Performance" Asian Journal of Business Management 5(1): 153-162, 2013 ISSN: 2041-8744; E-ISSN: 2041-8752 © Maxwell Scientific Organization, 2013.
6. Khan Tanveer Habeeb," EMOTIONAL INTELLIGENCE IN ADOLESCENTS WITH RESPECT TO DEMOGRAPHICS AND GENDER" International Journal of Educational Research Studies, ISSN 2454-5554
7. Goleman, D., 1998. Working with emotional intelligence. New York: Bantam Books.
8. <https://hrdailyadvisor.blr.com/2019/08/19/emotional-intelligence-applications-opportunities-and-criticism/>

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