# Emotional Intelligence and Instructional Performance of Electrical Installation and Maintenance Work Teachers in Niger State

Raymond Emmanuel (PhD) & Hassan Yunusa Jamilu

Abstract-The study sought to identify the relationship between emotional intelligence and the instructional performance of electrical installation and maintenance work teachers in Niger state. Two research questions were answered. Emotional Intelligence scale (EIS), Instructional Performance Scale (IPS), and Teacher Rating Scale (TRS), were administered to measure the emotional intelligence, self-reported Instructional Performance and student rated Instructional Performance of the teachers respectively. All the teachers and students of electrical installation and maintenance work in Niger state comprising 250 respondents were used for the study. Data obtained was analyzed using statistical software (SPSS, 20.00 version). Mean, standard deviation, pearson r correlation and t-test were used to determine the relationship, predictive values and differences in the variables under study. A positive correlation between EI and Instructional Performance on both self-reported and students rated scales was discovered. Among the ten components of EI considered in the study; emotional stability, self-motivation, managing relations, self-awareness and integrity emerged as the best predictors of Instructional Performance. Gender differences on the scores of EI and Instructional Performance was insignificant. In line with the findings of this study therefore, it was recommended among others that government of Niger state should come up with EI intervention programmes aimed at developing the emotional intelligence of the teachers of electrical installation and maintenance work as well as other related fields so as to improve their instructional performances.

Index Terms- Electrical Installation, Empathy, Emotional Intelligence, Gender, Instructional Performance, Maintenance Work, and Social Skills

#### Introduction

Everything done by human beings involves emotions. This includes every action, decision and judgment. Emotionally intelligent people recognize this and use their thinking to manage their emotions to come out successful in any situation they find themselves. Different literatures defined emotional intelligence (EI) in different ways. According to [1], emotional intelligence is the habitual practice of: using emotional information from ourselves and other people; integrating this with our thinking; using these to inform our decision making to help us get what we want from the immediate situation and from life in general.

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[2] originally used the term "emotional intelligence" in their published work and defined it as: A form of intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to \_\_\_\_\_ use this information to guide one's thinking and actions. According to [3], EI is an array of emotional and social abilities. It includes five components: intrapersonal, interpersonal, adaptability, stress management, and general mood. [4]'s model outlines four main constructs of EI: selfawareness, self-management, social awareness and relationship management. Within different constructs of EI, there are a set of emotional competencies like emotional self-awareness, accurate self-assessment, self-confidence, trustworthiness. conscientiousness. adaptability, achievement drive, initiative, empathy, service orientation, organizational awareness, developing others, influence, communication, conflict management, leadership, change catalyst, building bonds, teamwork and collaboration.

Unlike IQ, which is unchanging from childhood on, emotional intelligence can be developed. In fact, it usually does become greater with age and maturity. The importance of developing one's emotional intelligence is essential to success in the workplace. Utilizing the power and energy of one's emotions leads to high motivation, and improves problem-solving and decision-making [1]. Developing your emotional intelligence (EI) will improve your performance. Although it will take time, developing emotional intelligence will lead to sustainable behavior changes that will improve the way you manage yourself and the way you work with others and this leads to good working performance. Some of the advantages of developing your emotional intelligence are: improved relationships; improved communication with others; beer empathy skills; acting with integrity; respect from others; improved career prospects; managing change more confidently; fewer power games at work; feeling confident and positive; reduced stress levels; increased creativity; learning from mistakes.

According to [5], emotional Intelligence plays a vital role in social sciences; it has direct impact on the teacher's behavior working in an organization and it is important for the success of their profession. Teachers are considered as the main pillar in the educational system. They are the moderators through which knowledge can be transferred to the students who represent the foundation of the society. However, teachers cannot be the effective source of knowledge unless they possessed the essential skills, knowledge and talents. In the recent years, the concept of the emotional intelligence among teachers has gotten attention in the educational institutions due to its great importance. This is because emotional intelligence is really required to make the teachers perform effectively thereby improving their instructional performance.

Performance means how 'good' or 'bad' something is done. Instructional performance of electrical installation and maintenance work teachers is therefore the measurement of how good or bad is the activity of accomplishing the task of teaching the content of electrical installation and maintenance work. It is the measure of teaching effectiveness. The definition of instructional performance is however subjective. Different literatures on instructional performance or teaching effectiveness used variety of concepts. It has been explained by some researchers as teachers' characteristics [6]. Others were more concerned with the teaching process or the outcome [7]. Recently, [8] defined instructional performance of a teacher as having a good academic and professional knowledge with a clear concept of a subject matter, good preparation of the lesson with clear objectives, organized and systemic presentation of the concept with proper learning materials, ability to communicate his/her knowledge to the students successfully, classroom management, positive attitude towards students and colleagues, result feedback, accountability and ability to understand and motivate students irrespective of their gender.

Gender refers to the socially structured roles, behaviors, activities and attributes that a given society considers appropriate for men and women and women [9]. While a large body of researches focus on the gender of teachers and their instructional performances, fewer researches explore the relationship between emotional intelligence and gender. Studies have revealed that early experience, biological factors, educational policy and cultural context in complex ways are contributing to gender differences in science and mathematics achievement and ability [10]. In line with gender stereotypes, males are expected to achieve in math, science and technology, whereas females are reared to be interested in the arts and humanities [11]. This means that the expected success of a female in a given technological task is generally lower than that of her male counterpart. This societal belief however has not been supported much in the research community with regards to published literatures. With changing societal perception, differences in performance between males and females have shrunk to nearly insignificant levels in most standardized tests hence most researchers therefore do not support the notion of innate superiority of males in math, science and technology [12]. Despite these research findings, the gender stereotype about science and technology related subjects still exists.

Science and technology courses, such as electrical installation and maintenance work are said to be more demanding in terms of mathematical manipulations and abstract thinking compared to humanities [13]. The argument here therefore, is that, student in this field of study, especially the beginners (at technical college level) who are just entering the world of technology need to be handled with care and by teachers who possess high level of emotional intelligence. This is because studies have revealed that, students of engineering, technology and other related courses are often seen to be more anxious, excited and more difficult to handle emotionally [14]. They therefore need effective teachers who can attend to their emotional requirements.

Efficient teaching and good learning are two most important factors of success in the academia. Conventionally, in technical collages, a teacher brings two things to the classroom that are valuable to the learners. One is the subject expertise; the other is the knowledge of teaching method (a teacher's pedagogy, such as how to structure and explain the content being presented, uses materials and so on). Emotional intelligence is the third unrecognized component of a 'good' instructional performance of what the teacher has to offer to the learners [15]. This is because learning of technologically inclined subjects involves struggle, frustration and thrill or excitement. A good teacher of electrical installation and maintenance work needs to understand individual teachers/students and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement and motivation to learn. A study conducted at Cornell's College of Engineering also revealed that 62% of teachers/students of engineering and other related courses felt extremely anxious about their teaching/learning performances [14].

Furthermore, according to neuroscience, the neural connection between the thinking and emotional center of the brain can either enhance or inhibit person's ability to learn [16]. Studies have also shown that emotions can activate and stimulate the brain for better recall and are crucial to sensory development because this facilitates the storage of information [17]. This therefore helps in creating a positive learning environment and motivates teachers of electrical installation and maintenance work for better performance because how person teaches is as important as what he/she teaches. Hence, the problem of this study, put in form of a question is: What is the relationship between emotional intelligence and instructional performance of electrical installation and maintenance work teachers?

## **Theoretical Framework**

Theories are set of interrelated constructs, definitions and prepositions that present a rational view of phenomena by explaining or predicting relationships among those elements. Theoretical framework therefore, is a set of theoretical assumptions that explain the relationships among a set of phenomena [18]. Consequently, the following theories of intelligence are reviewed:

Multiple Intelligence Theory: The proponent of this theory was [19]. The theory states that every person has eight intelligences and most people can develop each intelligence to a level of competency. The intelligences tend to work together in complex way and there are many ways to be smart within each type of intelligence. These forms of intelligence according to Gardner are verbal/linguistic, logical/mathematics, musical/rhythmic, bodily/kinesthetic, visual/spatial, intrapersonal/ interpersonal and naturalistic [20]. The intelligences are essential in the teaching of electrical installation and maintenance work. For instance, a teacher who possesses high level listening competency can be able to discern different pitches, rhythms and tones in the course of radio maintenance work. The same thing goes for logical/mathematics skills which the teacher required to analyze abstract and complex electrical and electronics concepts into logical patterns that students can understand. By exploring the prospects of developing many of the eight intelligences therefore, teachers of electrical installation and maintenance work will be equipped to face their task which requires multiple skills.

**Emotional Intelligence Theory:** [21] postulated this theory. It states that the emotional intelligence of individuals is made up of five characteristics. These include: Self-Awareness, which is the ability of an individual to

recognize and understand his moods, emotions and drives as well as their effect on others; Self-Regulation, which is the ability of an individual to control or redirect disruptive impulses and moods and the propensity to suspend judgments - to think before acting; Motivation, which is individual's passion to work for reasons that go beyond money or status and propensity to pursue goals with energy and persistence; Empathy - ability to understand the emotional makeup of others and skills in treating people according to their emotional reactions; Social skill ability to manage relationships and build networks with other colleagues. However, [22] revealed that individuals are born with a general EI that determines their potentials for learning emotional competences. These competences are not innate talents, but rather learned capabilities that must be worked on and developed to achieve outstanding performance. Emotional intelligence by itself is probably not a predictor of instructional performance; instead, it provides a foundation for emotional competences which are very strong predictors of instructional performance as different jobs require different competencies. [23] found a significant link between specific EI competencies and effective teaching. For instance, a teacher of electrical installation and maintenance work needs to be competent in knowing his weakness and strengths (Self-awareness), build positive relationships with students and teachers, think before acting and have passion about the work of teaching. These competencies will enhance his ability to deliver effectively. The theory of emotional intelligence therefore is relevant to the instructional performance of the teachers of electrical installation and maintenance work; hence, it is adopted for this study.

### Purpose of the Study

This study sought to;

- 1. Determine the relationship between emotional intelligence and instructional performance of electrical installation and maintenance work teachers in Niger state;
- 2. Determine the relationship between emotional intelligence and gender of electrical installation and maintenance work teachers in Niger state.

### **Research Questions**

- 1. What is the relationship between emotional intelligence and instructional performance of electrical installation and maintenance work teachers in Niger state?
- 2. What is the relationship between emotional intelligence and gender of electrical installation and maintenance work teachers in Niger state?

### Methodology

The research was a correlation survey study in which standardized tools were used. The investigation examined the relationship between a predictor variable Emotional Intelligence with a criterion variable Instructional Performance. The population consists of all the teachers and students of electrical installation and maintenance work in the six technical collages in Niger state. This comprises of 50 teachers (42 males and 8 females) and 200 students (176 males and 24 females). Thus, a total number of 218 males and 32 females making a grand total of 250 respondents were used for this study.

A pilot study was carried out at Government Technical collage Funtua, Katsina state. Thirty (30) respondents, who were not part of the main study, were used to ascertain the validity and reliability of all the instruments used for this study. Emotional Intelligence scale (EIS) by [24], was used to measure the EI of the teachers and it is in line with Goleman's view of emotional intelligence. The split half reliability coefficient of the scale is 0.88 and its content validity is 0.93. The scale has a total of 34 items with responses of Strongly Agree (SA), Agree (A), Undecided (UD), Disagree (DA) and Strongly Disagree (SD). It measures ten components of emotional intelligence: Self-awareness, empathy, self-motivation, emotional stability, managing relations, integrity, self-development, value orientation, commitment and altruistic behavior.

Instructional Performance Scale (IPS), developed by [25], was administered to measure the instructional performance of the teachers. The test-retest reliability coefficient of the scale is 0.76 and its content validity is 0.91. The scale consists of a total of 68 items with response options of Strongly Agree (SA), Agree (A), Undecided (UD), Disagree (DA) and Strongly Disagree (SD). The areas of teaching measured by the items are: Academic and professional knowledge, preparation and presentation of lesson, class management, attitude towards students, parent, colleagues and head of collage, use of motivation, reward and punishment, result feedback, accountability and personal qualities.

Teacher Rating Scale (TRS), developed by [26] was used for the rating of teachers' instructional performances by students. The scale consists of 17 dimensions, grouped under three categories, which are: Personal qualities, professional competence and classroom performance of the teachers. The inter-rater reliability coefficient of the scale is 0.91 and the content validity is 0.85.

Approval for the investigation was obtained from the principals of each of the six technical collages in the state. All the teachers/students of electrical installation and maintenance work were contacted personally by the research assistant and after a general introduction, both tools were administered. The confidentiality of information obtained from the respondents was guaranteed. Completed questionnaires were collected after few days. Data analysis was done using statistical software (SPSS, 20.00 version). Mean, standard deviation, pearson (r) correlation and t-test were used to determine the relationship, predictive value and differences in the variables under study.

According to [27], Pearson r correlation can be used to determine the relationship between two variables in any circumstance. Correlation coefficient can take on values from -1.00, which is a strong negative relationship (indicating high scores on one variable go with low score on the second variable), through 0.00 (indicating no relationship at all), to +1.00, which on the other hand, is a strong positive relationship (indicating high score on one variable go with high score on the second variable).



Result

	Ν	Mean	Std Error of Mean	SD	
EI	250	127.58	0.572	9.100	
IPS	250	278.43	1.337	21.210	
TRS	250	85.63	0.900	14.300	

Table 1: EI, Self-Reported Instructional Performance (IPS) and Student-Rated Instructional	l Performance (TRS).
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Key: SD=Standard Deviation, N=250

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The table shows the descriptive statistics regarding the scores of the teachers on EI, Instructional Performance Scale (IPS) and Teacher Rating Scale for the entire population. The respective means of EI, IPS and TRS scores are 127.58 (SD=9.1), 278.43 (SD=21.21) and 85.63 (SD=14.3). The

analysis revealed the normal distribution of data. IPS scores were obtained through self-reported teachers' instructional performance, whereas, TRS scores were obtained through student-rated instructional performance.

	1	2	3	4	5	6	7	8	9	10	11	12
1. SA	-											
2. EMP	0.464	-										
3. SM	0.621	0.393	-									
4. ES	0.573	0.584	0.557	-								
5. MR	0.574	0.587	0.456	0.656	-							
6. Int	0.479	0.333	0.471	0.513	0.483	-						
7. SD	0.368	0.204	0.300	0.429	0.343	0.415	-					
8. VO	0.425	0.392	0.425	0.387	0.279	0.206	0.165	-				
9. Com	0.496	0.357	0.461	0.368	0.473	0.430	0.253*	0.450	-			
10. Alt	0.324	0.370	0.451	0.420	0.389	0.386	0.312	0.267*	0.396	-		
11. EI	0.326	0.457	0.526	0.367	0.421	0.517	0.584	0.560	0.659	0.507	-	
12. IPS	0.567	0.499	0.568	0.661	0.596	0.519	0.393	0.307	0.474	0.304	0.750	-
13. TRS	0.533	0.422	0.564	0.612	0.560	0.434	0.377	0.204	0.382	0.367	0.672	0.55

Key: N=250, SA=Self-Awareness, EMP= Empathy, SM= Self-Motivation, ES=Emotional-Stability, MR=Managing Relations, Int=Integrity, SD=Self-Development, VO=Value Orientation, COM=Commitment, Alt=Altruism, IPS=Self-Reported Instructional Performance, TRS=Student Rated Instructional Performance.

p < 0.05. All correlations except those marked with asterisks are significant at 0.01 level, values less than 0.249 is insignificant.

It was predicted that there would be a positive relationship between EI, IPS and TRS. This was supported in the study as a strong relationship (r = 0.750, p < 0.01) was found between EI and IPS. The correlation between IPS and TRS (r = 0.550, p < 0.01) indicates that, although there is a positive relationship between teachers' self-perception and students perception about their teachers' instructional performance, the relation is not very strong. This is because some of the teachers had reported their performances lower than how students rated them while other teachers reported higher than the students.

Data shown in table 2 also indicated that emotional stability had the highest correlation (r = 0.550) with IPS, followed by managing relations (r = 0.596), self motivation (r = 0.568), self awareness (r = 567), integrity (r = 0.529), empathy (r = 0.499), value orientation (r = 0.307), altruism (r = 0.304) and self development (r = 0.393). With TRS also, emotional stability had the highest correlation (r = 0.612), followed by managing relations (r = 0.560), self motivation (r = 0.564), self awareness (r = 0.533), integrity (r = 0.434), empathy (r = 0.422), commitment (r = 0.382), self development (r = 0.377), altruism (r = 0.367) and value orientation (r = 0.204).

Table 3: Difference in EI, IPS and TRS of Male and Female Teachers

	Gender	Ν	Mean	SD	t-test
EI	Μ	218	140.06	9.18	0.334
					(N.S)

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	F	32	139.16	9.15	
IPS	Μ	218	290.45	21.37	0.880 (N.S)
	F	32	290.41	21.10	
TRS	Μ	218	76.92	14.00	0.105 (N.S)
	F	32	77.35	14.57	

Key: N.S = Non Significant, SD = Standard Deviation

Table 3 indicates group statistics for EI, IPS and TRS in the case of male and female teachers. The mean of the male teachers EI was 140.06 (SD = 9.18), and that of the female teachers was 139.16 (SD = 9.15). The value of **t** for the two groups (0.334) indicated that there is no significant difference found in the EI of male and female teachers. The mean respective scores of IPS and TRS for male respondents were 290.45 (SD = 21.37) and 76.92 (SD = 14.00) whereas for female members it was 290.41 (SD = 21.10) and 76.35 (SD = 14.57). The value of **t** on IPS (0.880) and on TRS (0.105) indicates that there were no significant difference in the instructional performance of male and female teachers, although the mean of teachers' instructional performance rated by students was higher than that of female teachers, the difference was not significant at 0.05 level.

# Discussion

The result of the study emerging from table 1 indicates a normal distribution of both IPS scores obtained through self-reported teachers' instructional performance and TRS scores obtained through student-rated instructional performance. This shows a relationship between emotional intelligence and instructional performance of the teachers leading to students' ability to freely rate the performance of their teachers in class. This implies that, learners' perception may be influenced by their teacher's emotional intelligence. If learners perceive the teacher as showing care and respect towards them, they are likely to interpret the strictness of the teacher in a positive manner and try to follow the instructions given by him/her [15].

Table 2 revealed a positive relationship between EI, IPS and TRS. This indicates that, the EI of electrical installation and maintenance work teachers in Niger state technical collages has a significant positive relationship with their instructional performance. This means, the higher the EI, the better the teaching effectiveness, because emotionally intelligent teachers seek to have more confidence not just in

the subject content and materials but also in their ability to manage their own emotions and that of other colleague teachers and students. They also put energy in to planning for better performance by preparing to meet the learners' expectations [28]. This is proved as emotional stability had the highest correlation with IPS, followed by managing relations, self-motivation, self-awareness, integrity, empathy, value-orientation, altruism and self-development. On TRS also, emotional stability had the highest correlation. followed by managing relations, selfmotivation, self-awareness, integrity, empathy, commitment, self-development, altruism and value orientation. There is also a significant correlation between self-awareness, emotional stability and managing relations. This is because, if teachers cannot interpret their own emotions, they may not be able to do same for others [29].

It is worthy of notice that, according to students' ratings, empathy was not a very strong predictor of instructional performance. This was probably because a teacher may be high on empathy but he/she may not have acquired the skills, based on empathy, that lead to students' satisfaction in teaching, the ability to monitor their progress, or to resolve conflict. Teachers' self-reported empathy had a better predictive value for of instructional performance as it helps in understanding the emotions of others which leads to better interpersonal relations and also helps to deal effectively with conflicts [30]. This is supported in the study as empathy had a significantly high correlation with emotional stability and managing relations. Empathy also revealed significant correlations with altruism and commitment. This may be because empathy helps teachers in understanding the needs and expectations of the students, thus motivating them to be committed to improve their instructional performance.

Value orientation and altruism did not prove to be significant predictors as their correlation with of instructional performance was not very strong. But their correlation with self-motivation and overall EI was significant which shows that probably value orientation and altruism do not have a direct impact on of instructional performance but they are relevant in developing the overall EI of a teacher and motivate him/her for better performance.

Table 3 indicates group statistics for EI, IPS and TRS in the case of male and female teachers, where no significant difference could be seen between the EI and gender of electrical installation and maintenance work teachers. Research findings on gender differences in the EI of teachers are not very consistent and there are different views in that regard. Some studies like that by [31] have found significant difference in EI of teacher in private and public settings. [4] asserted that no gender difference in EI

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exist, admitting that while men and women may have different profiles of strength and weaknesses in different areas of emotional intelligence, their overall level of EI is equivalent.

#### **Conclusion and Recommendations**

The present study has revealed that complex jobs like the teaching of electrical installation and maintenance work to the technical college level students (beginners) require a teacher who possesses not just subject expertise and pedagogical abilities but also high level of emotional intelligence. This is because the students who are just being introduced to the world of technology tend to be anxious and more difficult to handle. Deficiencies in the components of EI in such type teachers can hinder the use of whatever technical and intellectual abilities the teacher may have. Gender differences in EI was not significant, hence it is concluded that, with changing societal perceptions, gender stereotype is also changing and female are starting to be seen as competent teachers of electrical installation and maintenance work in technical collages. From the findings of this study therefore, it is recommended that:

- 1. Awareness among teachers about the significance of improving their emotional intelligences towards effective teaching of electrical installation and maintenance work should be created.
- 2. The curriculum for technical teachers training should also be amended to include emotional intelligence developmental courses.
- 3. EI intervention programmes for the existing teachers of electrical installation and maintenance work and other related areas should be introduced in the state to develop the IE of her teachers as this will enhance their instructional performance.
- 4. More female technical teachers should be employed to teach electrical installation and maintenance work so as to boost the teaching manpower and discourage gender stereotyping. This is especially as this study revealed no significant difference between EI and gender of teachers of electrical installation and maintenance work teachers.

#### References

- [1] Sparrow, T. and Knight, A. *Applied Emotional Intelligence*. Wiley: Chichester, 2006.
- Solvey, P. and Mayer, J.D. "Emotional Intelligence. Imagination, Cognition and Personality". 9(3), 185-211. Doi: 10.2190/DUGG-P24E-52WK-6CDG, 1989.
- [3] Bar-on, R. *The Emotional Quotient Inventory (EQ-I) Technical Manual.* Toronto, Canada: Multihealth System, 1997.

- [4] Goleman, D. Working with Emotional Intelligence. New York: Bantan, 1988.
- [5] Arvind, H., Soofi, A.M. and Ruwaiya, S.S. A Study on Emotional Intelligence Among Teachers: Case Study of Private Educational Institutions in Muskat. *International Journal of Application or Innovation in Engineering and Management*, 2(7), 359-367. 2013.
- [6] Strong, J.H., Turker, P.D. and Ward, T.J. Tennessee Value Added Assessment Data Base: Implications for Education and Research. *Journal of Personnel Evaluation in Education*, 12(3), 247-256, 2003.
- [7] Flander, N.A. and Simon, A. *Teacher Effectiveness*. In Ebel, R.L. (ed), Encyclopedia of Education Research (4<sup>th</sup> ed, pp. 142-143). London: McMillan. 1969.
- [8] Ajeya, J. and Indoo, S. Teacher Effectiveness in Relation to Emotional Intelligence among Medical and Engineering Faculty Members. Europe *Journal of Psychology*, 8(4), 667-685. 2012.
- [9] World Health Organisation. Retrieved from: <u>www.who.int/gender/whatisgender/en</u>. 2015.
- [10] Halpern, D.F., Benbow, C.P., Geary, D.C., Gur, R.C., Hyde, J.S. and Gemsbacher, M.A. The Science of Sex Differences in Science and Mathematics. *Psychology Science in the Public Interest*, 8(1), 1-5. 2007.
- [11] Ceci, S.J. and Williams, W.M. The mathematics of sex. How Biology and Society Conspire to Limit Talented Women and Girls. Oxford: Oxford University Press. 2010.
- [12] Johnston, T. No Evidence of Innate Gender Difference in Mathematics and Science, Scholars Assert. Standard Report. Retrieved from: <u>http://news.stanford.edu/news/2005/february9/mat</u> <u>h-020905.html</u>. 2006.
- [13] Foster, C. and Spencer, L. Are Undergraduate Engineering Students at Greater Risk for Heart Disease Than Other Undergraduate Students? *Journal of Engineering Education*, 92(1), 73-77. 2003.
- [14] Schneider, L. "Perceived Stress among Engineering Students". A Paper Presented at St. Lawrence Section Conference. Toronto, Canada. Retrieved from: www.asee.morrisville.edu. 2007.
- [15] Mortiboys, A. "Teaching with Emotional Intelligence: A Step by Step Guide for Higher and Further Education Professionals". New York: Routledge. 2005.
- [16] Cacioppo, J.T. and Bernston, G.G. Wise up: The Challenge of Lifelong learning. London: Bloomsbury. (2009)
- [17] Rosenfield, I. The Invention of Memory. New York: Basic Books, Inc. 1988.

- [18] Camp, W.G. Formulating and Evaluating Theoretical Frameworks for Career and Technical Education Research. *Journal of Vocational Education Reseach*, 26(1). Retrieved from: http://scholar.lib.vt.edu/ejournals/JVER/v26n1/cam p.html. 2001.
- [19] Gardner, H. The Shattered Mind. New York: Knopf. 1975.
- [20] Ogwo, B.A and Oranu, R.N. Methodology in Formal and Non-Formal Technical/Vocational Education. Uwani, Enugu: Ijejas Printers and publication Company, 2006.
- [21] Goleman, D. Emotional Intelligence: Why it Matters more than IQ. New York: Bantam Books. 1995.
- [22] Goleman, D. *The emotionally intelligence workplace*. San Francisco: Jossey-Bass, 2001.
- [23] Haskett, R. Emotional intelligence & teaching success in higher education. *Dissertation Abstracts International. A, the Humanities and Social Sciences,* 64, AAI3093435, 2003.
- [24] Hyde, A., Pethe, S. and Dhar, U. Emotional Intelligence Scale (EIS). Agra, India: National Psychology Corporation. 2007.
- [25] Puri, S. and Ghakar, S.C. *Instructional Performance Scale (IPS)*. Manasvi, Agra, India. 2010.
- [26] Deva, R.C. *Teacher Rating Scale (TRS)*. Agra, India: National Psychology Coporation. 2003.
- [27] Ozuagulu, A.E. Practical Guide to Write Research Project Report in Tertiary Institutions. Enugu: Cheston Ltd. 2011.
- [28] Jensen, A. *Super Teaching*. San Diego: The Brain Store. 1988.
- [29] Carver, C. Self-Awareness. In Leary, M.R. and Tangney, J.P. (Eds). Hand book of Self and Identity (pp179-196). New York: Gullford. 2003.
- [30] Welch, J. The Best Teams are Emotionally Illiterate. Industrial and Commercial Training, 44(1), 1-6. 2003.
- [31] Mayer, J.D. and Geher, G. Emotional Intelligence and Identification of Emotion. Intelligence. *Journal* of Psychology, 22(3), 89-113. 1996.

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