



Emotional Intelligence and Teaching Competence of the Grades 3 and 6 Teachers in Borbon District

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ABSTRACT

Teachers develop a sense of self-awareness through emotional intelligence, which enables them to classify their own and others' emotions. Additionally, this enables teaching professionals to recognize their own emotions and ideas, to recognize their own strengths and flaws, and to develop self-confidence. This study wants to examine the relationship between teacher competence and emotional intelligence that held by teachers to increase the teacher performance. Based on the findings, teachers have high level of emotional intelligence in terms of self-awareness, social awareness, self-management and relationship management. Moreover, teachers got average performance in teaching Mathematics and Science and very satisfactory in overall performance based on performance appraisal system for teachers. Although the initial results suggested that the course had a significant impact, critical analysis revealed that it had a substantial impact in certain areas of emotional intelligence; thus, it is suggested that additional research be conducted to develop instruments to identify areas where teachers' emotional intelligence and student performance are related.

Keywords: Emotional Intelligence, Performance, Awareness, Management

Introduction

Mathematics is the foundation of Science and Technology. Everyone needs mathematics in order to function in society and the world of work. Therefore, our curriculum reflects the understanding that mathematical literacy is important for all student to possess and apply. Our students will be prepared to function in a global society through the use of problem solving, communication and reasoning by integrating the mathematical concepts across the curriculum areas in the real-world situations.

Seminal contributions have been made by Park et al. (2021) emphasized that mathematics is a fundamental part of human thought and logic, and integral to attempts at understanding the world and ourselves. Mathematics provides an effective way of building mental discipline and encourages logical reasoning and mental rigor. In addition, mathematical knowledge plays a crucial role in understanding the contents of other school subjects such as science, social studies, and even music and art. Previous studies have shown that mathematics education reforms call for decreasing the emphasis on complex paper-and-pencil computation drills and placing greater attention to mental computation, estimation skills, thinking strategies for mastering basic facts and conceptual understanding of arithmetic operations. Such learning can occur in student-centered classrooms, using new, innovative, contemporary methods of teaching, and abandoning traditional transmission of knowledge. The challenges of contemporary teaching of mathematics can be overcome with continuing teachers' professional development (Lipowsky & Rzejak, 2012).

The role of teachers becomes more important as they facilitate the psychological growth of the students too. There is a possibility that instructors can identify their own emotional state as well as the emotional state of their scholars, thus generating a deeper understanding of why they and their students tend to behave in a particular manner. On the other hand, lack of awareness about the emotional state of self or others can give rise to problematic interpretation of the behavior as well as adoption of inappropriate approaches to handle them. Emotional intelligence is seen taking on a central position in generating the good performance among teachers in schools, colleges and universities (Jennings & Greenberg, 2009). In order to become effective teachers, they must consider their teaching competence beyond the intellectual competence, professional skills and academic qualification. The implications of level of emotional competence of the teachers can be manifested in the form of performance of students (Brackett & Katulak, 2006). Inability of a teacher to create a classroom environment that supports the fast paced and quick learning among students can inhibit the performance of the pupil, while the teacher performance is explained through the quality of interaction which has been established with the students. Based on this background, the researchers have suggested inclusion of training for teachers that specifically aims at the development of their level of emotional competence (Hawkey, 2006). In addition to this, emotionally intelligent teachers are also able to recognize how their words and actions can have an impact on the behavior and feelings of their students. Grant (1993) considered the behavior of teacher as a means of instigating participation of students in various class activities. She and Fisher (2002) have further supported the role of teacher's emotional regulation as a means of directing student performance within the context of Taiwan. The performance of teachers can be measured in terms of the capability of the students to understand the

content covered in classroom and be able to perform well in test or exam. The level of cognitive development achieved by students was endorsed by friendly classroom environment that has been maintained by the teachers.

Teacher competence needs carrying out of the teaching duties in schools. According Barlow (1985) stated that the teacher competence is the ability of teacher responsibility to show his or her duties appropriately. Wade and Moor (1992) stated that teachers need pedagogical knowledge and training to developed themselves as a teacher proficient confident of their own abilities and faith in the potential students. To make high quality learners, teacher must be the master of four competences. All of competences must be capable to improve the teacher quality are pedagogical, professional, social, and personality (Government Regulation, No. 19, 2005). Sudjana (2002) the teacher competences can be divided into three areas, there are pedagogical, personal, and social. Murniati (2007) the one of profession character needs to have skill and qualifications which has been standardized by the authorities (teacher standards competence). Soedarminto (1991) teacher as an educator needs professional skills in the form of competences (a) knowledge competences, the point is on cognition aspect/teacher knowledge; (b) performance competence, which emphasizes to the behavior aspects/teacher competence that can be observed; (c) the consequence of competences the point is on student learning aspects output from the teacher knowledge competence result and appearance

Moreover, teacher performance can see from the emotional intelligence of teacher in the teaching process, emotional intelligence is the ability for recognizing our own feelings and the feelings to each other's, the ability to manage the emotion better in ourselves and relationship to the others (Hamzah, 2005). It can be said that the teachers have good emotional intelligence is the teacher who have the ability to manage the emotions and feelings, as well as more active in cooperation for achieving educational goals. Robert Rosenthal in his research indicates that people who can able to analyses feelings and nonverbal code are better to adjust themselves emotionally, more popular, easier to interact, and more sensitive (Goleman, 2006). In the learning process, emotional intelligence of teachers is needed, by Mulyasa (2006) so that why learning take place optimally and improve to the maximum learning. There are several ways to develop emotional intelligence in learning that provides a conducive environment, makes a democratic learning situation, empathy, and perceived by the students, helps the students find a solution in any problems that may they get, engages the students optimally in learning, physically, socially, and emotionally, responds to all of student's positive behaviors, and avoids the negative response, gives the example for obeying the rules and discipline learning. According to Goleman (2006), emotional intelligence is the ability to regulate emotional life with intelligence (to manage our emotional life with intelligence); to maintain the emotional with harmony and disclosure (the appropriateness of emotion and expression) through the self-awareness skills, self-control, self-motivation, empathy, and social skills. Emotional intelligence is the ability to recognize feelings, reach and build feelings to help the idea, feelings and understanding are meaning and dept feeling control that fosters emotional and intellectual (Stein & Book, 2002).

Teachers Competence

There currently is an abundant knowledge-base to inform us that in schools teachers play the critical role in student learning and achievement. Research reveals that how teachers instruct and these interactions with students is the cornerstone around which to build effective schools. A summary of the available studies accumulated over the past 40 years on a key education driver, teacher competencies offer practical strategies, practices, and rules to guide teachers in ways to improve instruction that improves student performance and the quality of the work experience. Four groupings of these competencies can help organize and simply for teachers what they need to master to maximize their performance: classroom management, instructional delivery, formative assessment, and personal competencies. These four categories also provide the essential core around which decision makers can construct teacher preparation, teacher hiring, teacher development, and teacher and school evaluations (TWI, 2021).

As a profession, all teachers should have pedagogical competence, personality competence, professional competence and social competence. Pedagogical competence is the ability in the management of students that includes an understanding of the student, designing and conducting learning, evaluation of learning outcomes, and the development of student to actualize various potentials. Personal competence is personal abilities that reflect the personality steady, stable, mature, wise and dignified, become role models for students, and noble. Professional competence is the mastery of learning materials that include a broad and deep mastery of curriculum materials, school subjects and substance of knowledge that overshadow his material, as well as mastery of the structure and science's methodology. While the social competence is teacher's ability to communicate and interact effectively with students, other teachers, staff, parents/guardians of students and the surrounding community (Kunandar, 2009).

Emotional Intelligence

The concept of emotional intelligence is not a new topic and concept. May be Arastou, be the first one who attend of the importance of feeling in human interactions. Arastoustates: getting excited is easy, everyone can get excited but getting excited in front of certain person, to the certain extent of, in certain time for certain reason and to the certain way is not easy (Gelman ,1998:15) cited by (Nazari & Emami, 2013). Moreover, a series of recent studies O'Connor et al. (2019) has indicated that Emotional Intelligence (EI) emerged in the 1990s as an ability-based construct analogous to general Intelligence. However, over the past 3 decades two further, conceptually distinct forms of EI have emerged (often termed "trait EI" and "mixed model EI") along with a large number of psychometric tools designed to measure these forms. Currently more than 30 different widely-used measures of EI have been developed. Although there is some clarity within the EI field regarding the types of EI and their respective measures, those external to the field are faced with a seemingly complex EI literature, overlapping terminology, and multiple published measures.

Problem Statement

Base on the background above, the researcher finds some problems in teaching learning process of Mathematics and Sciences in classroom that is successful. Hence, this study determined the teacher's emotional intelligence and teaching competence. Specifically, this answers the following inquiries: Level of emotional intelligence of the elementary school in terms of: self-awareness, self-management, social awareness and relationship management. It also provides the level of competence of the teachers in terms mean percentage score in Mathematics and Science subjects.

Methodology

This study utilized the descriptive research method that determined the emotional intelligence and teaching of basic education teachers. The researcher used the purposive sampling technique. Overall, there were 34 teachers who are assigned to teach mathematics and science subjects. Hence, all the teachers were the respondents of the study.

The instrument of the study was adopted from the Emotional Quotient Inventory (EQ-i) by Dr. Travis Bradberry and Dr. Jean Greaves to determine emotional intelligence of the mathematics and science teachers. The competence of the teachers was based on the mean percentage score in science and mathematics of the National Achievement Test.

Results and Discussions

Table 1. Level of Emotional Intelligence Among Teachers based on Self Awareness

Indicators	WM	Interpretation
Confident in your abilities	4.11	High
Admit your emotions	3.61	High
Understand your emotions	3.88	High
Recognize the impact of your behavior has upon others	3.67	High
Realize when others influence your emotional state	3.82	High
Mean	3.82	High

Table 1 presents the data in terms of emotional Intelligence Among Teachers based on Self Awareness. Findings shows that teachers have high self-awareness in terms of the statement confident in your abilities which garnered a weighted mean of 4.11 which verbally described as high, while the statement refers to admit your emotions got the lowest weighted mean of 3.61 which also verbally described as high. Overall, in terms of self-awareness teachers got an overall rating of 3.82 which verbally described as high. This indicates that teachers were having a clear perception of their personalities including strength and weaknesses that makes them and effective and efficient teacher.

Table 2. Level of Emotional Intelligence Among Teachers based on Self-Management

Indicators	WM	Interpretation
Can be counted on	4.44	Very High
Handle stress well	4.26	Very High
Embrace change early on	3.7	High
Tolerate frustration without getting upset	4.0	High
Consider many options before making a decision	3.44	High
Strive to make the most out situations whether good or bad	4.02	High
Play a part in creating the pleasant circumstances you encounter	4.29	High
Reset the desire to act or speak when it will not help the situation	4.2	High
Mean	4.04	High

Table 2 presents the data in terms of emotional Intelligence Among Teachers based on Self-Management. Findings shows that the statement refers to can be counted on got the highest weighted mean of 4.44 which verbally described as very high, while the statement refers to embrace change early on got the lowest weighted mean of 3.7 which verbally described as high. Overall, in terms of self-management, teacher got an overall rating of 4.04 which verbally described as high. This indicates that teachers have a high self-management that makes them a successful in terms of career and personal life.

Table 3. Level of Emotional Intelligence Among Teachers based on Social Awareness

Indicators	WM	Interpretation
Avoid things you regret when upset.	4.38	Very High
People off when something is bothering you.	4.14	High
Are open to feedback.	4.05	High
Recognize other people feelings.	3.97	High
Accurately pick up on the mood in the room.	4.11	High
Hear what the other person is really saying.	3.85	High
Are withdrawn in social situations.	3.85	High
Mean	4.05	High

Table 3 presents the data in terms of emotional Intelligence Among Teachers based on Social Awareness. Findings shows that the statement refers to avoid things you regret when upset got the highest weighted mean of 4.38 which verbally describes as very high while the statements refer to hear what the other person is really saying and are withdrawn in social situations got the lowest weighted mean of 3.85 which also verbally described as high. Overall, in terms of social-awareness, teacher got an overall rating of 4.05 which verbally described as high. This indicates that teachers have a high social-awareness that makes them a responsible teachers and citizen in the country.

Table 4. Level of Emotional Intelligence Among Teachers based on Relationship Management

Indicators	WM	Interpretation
Explain yourself to others	3.97	High
Directly address people in difficult situations	4.40	Very High
Get along well with others	4.40	Very High
Communicate clearly and effectively	3.91	High
Show others you care what they are going through.	3.7	High
Handle conflict effectively	3.91	High
Use sensitivity to another person's feelings to manage interactions	4.40	Very High
Learn about others in order to get along better with them	4.05	High
Mean	4.09	High

Table 4 presents the data in terms of emotional Intelligence Among Teachers based on Relationship Management. Findings shows that the statements refer to directly address people in difficult situations, get along well with others, and use sensitivity to another person's feelings to manage interactions got the highest weighted mean of 4.40 which verbally described as very high, while the statement refers to show others you care what they are going through got the lowest weighted mean of 3.7 which verbally described as high. Overall, in terms of relationship management, teacher got an overall rating of 4.09 which verbally described as high. This indicates that teachers have a high relationship management that makes them a connect and fulfill their obligations as a teacher.

Table 5. Summary on the levels of Emotional intelligence of the teachers in Borbon District

	Composite Mean	Interpretation	Rank
Social Awareness	3.82	High	4
Self-Management	4.04	High	3
Social Awareness	4.05	High	2
Relationship Management	4.09	High	1
Aggregate Mean	4.0	High	

Based on the table, the teacher's emotional intelligence is high in terms of the level of relationship management (4.09); social awareness (4.05) and self-awareness (3.82). This means that teachers have high level of emotional intelligence. This phenomenon can be attributed to the different activities which are engaged in by the teachers within the school and community. Their level of self-awareness is harnessed due to their family related experiences. The school activities and deadlines have developed the teacher's self-management. The realities and challenges that they have encountered contributed their social awareness as well as the relationship management when they work with fellow teachers, parents and significant others.

Table 66. Summary on the Competence of the teachers based on the Mean Percentage Scores in Science and Mathematics

Mean Percentage	Description	Mathematics		Science		Overall total	
		f	%	f	%	f	%
75 and below	Poor	18	52.94	17	50	35	51.47
75-79 - Average	Average	13	32.23	10	29.41	23	33.82
80-84 Satisfactory	Satisfactory	3	14.83	7	20.59	10	14.71
85-90	Very Satisfactory	0	0	0	0	0	0
90-above	Outstanding	0	0	0	0	0	0
Total		34	100	34	100	68	100

It can be gleaned in the table that 18 (52.94%) teachers have a meanpercentage score equivalent to poor. There are 13 (32.23%) teachers who have average mean percentage scores in mathematics. There are 3 (14.83%) teachers whose level of competence in mathematics is equivalent to satisfactory. In Science, there are 17 (50%) who have mean percentage scores equivalent to poor while 10 (29.41%) have average mean percentage scores. Finally, there are 7 (20.59%) teachers who have mean percentage scores equivalent to satisfactory.

Table 7. Summary on the performance of the Teachers based on their ratings in the revised performance Appraisal System for teachers

Teaching Performance	Frequency	Percentage
Poor	0	0
Needs Improvement	0	0
Satisfactory	0	0
Very Satisfactory	34	100
Outstanding	0	0
Total	34	100

All the elementary school teachers in Borbon District have very satisfactory teaching performance based on the revised performance appraisal system for teachers. The criteria for this evaluation include instructional competence, professional and personal characteristic and punctuality and attendance. Other factors comprising teacher performance and their instructional competence include lesson planning and assessment, school and community involvement.

Table 8. Test of Significant Relationship between the teacher's emotional intelligence and their competence

Correlated Variables (Regression Analysis)		P-value	Decision on Ho	Level of Significance
Independent	Dependent			
Emotional Intelligence	Teaching Competence			
Social Awareness	Based on Math (MPS)	0.573	Failed to reject Ho	Not significant
Self-Management		0.970	Failed to reject Ho	Not significant
Social Management		0.690	Failed to reject Ho	Not significant
Relationship Management		0.182	Failed to reject Ho	Not significant
Social Awareness	Based on Science (MPS)	0.806	Failed to reject Ho	Not significant
Self-Management		0.026	Reject Ho	significant
Social Management		0.477	Failed to reject Ho	Not significant
Relationship Management		0.611	Failed to reject Ho	Not significant
Social Awareness	Based on teaching Performance Appraisal	0.756	Failed to reject Ho	Not significant
Self-Management		0.477	Failed to reject Ho	Not significant
Social Management		0.075	Failed to reject Ho	Not significant
Relationship Management		0.516	Failed to reject Ho	Not significant

Table 8 presents the teachers emotional intelligence and teaching competence of NAT results in mathematics. Self-awareness has a p-value of 0.573. Thus, the acceptance of the null hypothesis. Therefore, there is no significant relationship between the teacher's emotional intelligence and self-awareness of NAT results in mathematics. Data also shows that there is no significant relationship between the teacher's emotional intelligence and

self-management, relationship management and social awareness of NAT results in mathematics. On the other hand, data also showed that there is a significant relationship between the teacher's emotional intelligence and self-management of NAT result in science.

Table 9. Test of the significant variances in the emotional intelligence levels and competence of the teachers

Emotional Intelligence	N	Mean	Variance	Decision	Interpretation
Social Awareness	34	75.7647	13.943	Reject Ho	Significant
Relationship Management	34	78.5882	32.371	Reject Ho	Significant
Self-management	34	78.0588	24.542	Reject Ho	Significant
Self-awareness	34	77.1765	29.422	Reject Ho	Significant
NAT-Math	34	74.8732	11.990	Reject Ho	Significant
Teaching Performance	34	8.4079	.028	Reject Ho	Significant
NAT- Science	34	75.2182	24.401	Reject Ho	Significant

Table 8 showed the data in terms of significant variances in emotional intelligence levels and competence of the teachers. Data shows that social awareness have a weighted mean of 75.7647 and have a variance of 13.943. Relationship management on one hand have a weighted mean of 78.5882 and have a variance of 32.371. Self-management have weighted mean of 78.0588 and have a variance of 11.990. Teaching performance have a weighted mean of 8.4079 and have a variance of .028. NAT Science have a weighted mean of 75.2182 and have a variance of 24.401. All hypothesis were rejected. Therefore, there are no significant variances in the emotional intelligence levels and competence of the teachers.

Conclusion

Based on the findings, teachers have high level of emotional intelligence in terms of self-awareness, social awareness, self-management and relationship management. Moreover, teachers got average performance in teaching Mathematics and Science and very satisfactory in overall performance based on performance appraisal system for teachers. Further, there is a significant relationship between the teacher's level of emotional intelligence on self-management and the mean percentage score in science. There was also a significant variance in their emotional intelligence' levels of the teachers in self-awareness, social awareness, self-management and relationship management. Overall, there were significant variances in the performance of the teachers based on the mean percentage score of pupils on Mathematics and Science as well as their teaching performance based on the performance appraisal system.

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