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Emotional Value Judgment and Achievement in Basic Science

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Abstract

The study sought to examine emotional value judgment on student achievement in Basic Science. The study was carried out in Ijebu-North Local Government Area of Ogun State. Data were collected through valid questionnaire sent to five secondary schools within the local Government. One Hundred Junior Secondary II Students were used from the selected schools. Correlation, regression and statistical tools were used. With the through research question used, it was discovered that the consideration of emotional disposition has noticeable positive impact on the improved academic performance of students' in Basic Science. It was also discovered

that there lies a strong and positive correlation between emotional judgment and achievement in Basic Science. This study is a step towards reducing psychological problem in Basic Science teaching and learning.

Introduction

According to Barlow J. and Maul D. (2000), emotion is central to human life in interaction with family and friends. Emotion is equally recognized as a critical interaction in the service economy. Emotional value is the economic value or monetary worth of feelings when customers positively experience product and service. And it is "emotional value, as much as quality or any other dimension of an organization worth that can make or break a business. Also included are friendly service culture, emotional competence as your organization service model, maximizing customer experience empathy, viewing complaints as emotional opportunities and using emotional connection to increase customer royalty.

Emotional value judgment is the science that sought to understand the piece of nature that is, how human being would be led seriously as tray if it did not take account of the feelings (and phatasies and reminiscences and the like) that shape our inner lives; the choice we make, the things we do, the way we behave, who we are (http/www.emotionaleducational.org.uk). a neuroscientist villainous Ramachenelran commented in the BBC Reith lecture (2003). Consciousness is a construct of unconscious process and complacency that rationality will somehow solve problem is unfounded.

Science is a process of searching for patterns, concept describing or explanation in the universe. In a sense, science is knowledge based and process based.

The broad aim of Science to Erinosho (2000) in the Science Curriculum include the development of Scientific skill and processes, cultivation of Scientific attitudes and appreciation of the social and ethical base of science.

Basic Science is one of the most important subjects in junior secondary school curriculum in Nigeria. It is offered as a unified or integrated subject at Junior Secondary school level, comprising Biology, Physics, Chemistry, Agriculture and Geography. However, at the senior secondary level the subjects are separated with a view to provide a carrier option. The objectives of each of these subjects, which are clearly stated in the curriculum, suggest the need to provide an effective learning.

Environment at the school Level; This will involve proper teacher pedagogy and ideas about how science material may be used so that active leaning is achieved while student at the same time enjoy the aid exploring the world around them (Oludipe, 2000),

The objective of Basic Science Curriculum which emphasizes learning by inquiry rather than rote learning of Scientific facts make it imperative for Science teachers to be dynamic and effective in teaching scientific concepts.

Presently, the performance of student in Basic Science is low compared to other subjects, (Olatoye and Afuwape 2004). Some of the problems associated with this low performance are student attitude and poor quality of teaching Basic Science in Nigeria, (Oludipe 2000).

Achievement would be serial to mean the ability to achieve the desired goal. Oshin (1991) opined that achievement related to a number of personality variable indication of good adjustment.

They also opined that sense of personal work, high academic achievement, and motivation are mostly responsible for achievement. When exposed to a course of instructions, every individual aims at achieving this is however dependent on a number of factors which could be inhibitive or facilitating factors.

Afuwape and Aanu (2010), inhibitive factors affecting achievement motivation in Basic Science includes poor instruction materials, inadequate Basic Science stimulation, cognitive deficits at certain levels of Basic Science development, difficulties in symbolic thinking, poor attitude leading to lack of interest and non-practicalizing with life objects related to the topic, value attached and alternative involved.

In consequence, the study sought to examine emotional value judgment on students' achievement in Basic Science.

Research question

What is the relative influence of emotional value judgment on student Basic science Achievement?

- What is the relationship between emotional value judgment and Basic Science?
- Is there any significant difference between male and female student emotional value judgment in Basic science?

- Is there any significant difference between older (14years and above) and younger (13 years and below) emotional value judgment in Basic science?

Methodology

This study made use of questionnaire on emotional value judgment. Gender and age were examined as moderator variables. The sample covers 100 Junior Secondary school two student in ijebu-north local government area of Ogun State, Nigeria

Twenty students were chosen in each school using simple random sampling. The achievement test scores of student were collected. The instrument was validated with 0.71 reliability co-efficient.

Administration of instrument

The instrument was taken to the students with discussion on the instrument and arrangement were completed with the school principal and teacher to assist in the monitoring of the questionnaire. The research was assisted by the teacher in their respective school to ensure that all the questionnaire were administered and collected back immediately by the researcher with gratitude to both the students, teachers and principal.

Scoring of instrument

The instrument was manually scored. The positive items were scored four through one while the reverse was the case for negative items. The total score earned by a student was taken to be directly proportional to the students' level of attitude.

Data Analysis

The data generated was analyzed using t-test, person product Moment Correlation and Linear Regression.

Results

The sequence of presentation of result is in accordance with that of the research questions.

Table 1: Emotional value judgment as a predictor of student science achievement

	Sum of square	df	Mean square	F	sig	Remark
Regression	167.507	1	167.507	11.023	.001	Significant
Residual	1439.243	98	15.196			P<0.05
Total	1656.750	99				

R = 0.318

R square = 0.101

Adjusted R square = 0.092

Standard Error = 3.898

In table 1 above, this independent variable (emotional value judgment) account for 10.1% of the total variance in student science achievements (R Square) =0.101, p<0.05. This percentage is significant. Therefore, emotional value judgment is an important factor to predict student science achievement.

Table 2 Relationship between emotional value judgment and student science achievement

	Mean	Std deviation	N	R	P	Remark
Emotional value judgment	44.6800	16.47826	100	+0.314	0.001	Significant
Science achievement	10.7500	4.09082	100			P<0.05

In table 2 above, there is positive significant relationship between emotional value judgment and student science achievement ($r = +0.318$, $p < 0.05$). The relationship is significant. Thus, the higher the emotional value judgment, the higher the student science achievement conversely, the lower the emotional value judgment, the lower the student achievement,

Table 3: comparison of Emotional Value Judgment, Science Achievement by Gender

	Gender	N	Mean	Std Deviation	St. Error Mean	df	t	p	Remark
Emotional Value judgment	Male	57	43.1053	17.58925	2.32975	98	0.273	0.273	Ns
	Female	43	46.7674	14.82250	2.26041				
Science achievement	Male	57	10.4211	4.33403	.57406	98	0.357	0.357	Ns
	Female	53	11.1860	3.74964	.57181				

In table 3 above there is no significant difference between male and female students' emotional value judgment, science achievement (t = - 1.101, 1.101-0.925 respectively p>0.05).

Table 4 Comparison of emotional value judgment, science Achievement by age

	Age	N	Mean	Std Deviation	St. Error Mean	df	t	p	Remark
Emotional Value judgment	14 yrs and above	54	41.2037	16.29606	2.21761	98	-2.337	0.021	Significant
	13 yrs and below	46	48.7609	15.90833	2.34555				
Science achievement	14 yrs and above	54	10.5370	4.27239	.58140	98	-0.5	0.575	Ns
	13yrs and below	46	11.0000	3.89872	.57483				

In table 4.4 above, there is significant difference between older (14 yrs and above) and younger (13 yrs and below) student emotional value judgment students of 13 yrs and below have higher emotional value judgment than students of 14 yrs and above. However there is no significant difference between 13 yrs and below and 14 yrs and above student science achievement

(t = -0.562,p>0.05).

Discussion

The finding of this work revealed a significant influence of emotional value judgment and achievement in Basic science in Nigeria. In table 4.1 above, this independent variable account for 10.1% of the total variance in student

science achievement (R square =0.101, $p<0.05$). This percentage is an import ant factor to predict student achievement in Basic science. The significant impact of the independent variable is not unexpected, considering the studies and assertion of (Fisher &Edward, 198; Ahkanasy & Hooper, 1999; Adeyemo & Ogunyemi, 2003; Onabanjo & Famuyiwa, 2004; Erinosho, 2008). The result also corroborated Afuwape and Aanu (2010) assersion on the opinion effectiveness of teacher factor in carrying quality science teaching and learning.

Emotional value judgment is felt when a person express in her judgment an attitude. Makes a value judgment and her judgment is not a value judgment if no attitude is expressed.

Implication

The significant of emotional value judgment in student science achievement provides the empirical basis to suggest that practicing Basic science and Technology (Integrated Science) teacher should have great feeling for their student, environment, instructional material and the curriculum it is thus hoped that the effective practice of these will assist the teacher to facilitate the learning of science effectively.

Reference

Adeyemo and Ogunyemi, (2003) the combined and relative of Emotional intelligence and self-efficacy on job satisfaction of academic staff in a Nigeria University – Journal of Research in counseling psychology Volume 9, No 1, August 2003.

Afuwape, M.O. and Aanu E. M. (2010) Enhancing Integrated Science for Higher Studies: Teeacher-Students Opinion. *Osiele journal of Education studies* vol. 6, Pg. 95-107, published by Federal College of Education, Osiele, Abeokuta. ISSN 1116-7890.

Ashkanasy, N. M., Hooper, G. (1999). Perceiving and management Emotion in the workplace: A research agenda based on Neurophysiology. Paper presented at the Third Australian industrial and organization psychology conference, Bristbane.

Ballow J. & Maul D. (2000). *Science Teaching Effectiveness in Schools available on the net* www.eurojournals.com/ejss.

Erinosho, S.Y. (2000). Teaching science for Effective Learning in Erinosho Adesanya, A. and Ogunyemi, A. (2000). Teaching effectiveness in Nigeria Schools Ago-Iwoye Published by Department of curriculum studies and Instructional Technology Ago-Iwoye, Ogun State.

Erinosho, S.Y. (2008). Teaching Science in secondary school. African culture International Center Lagos, Nigeria.

Fisher, B.M. & Edwards, J.E (1988). consideration and initiating structure and their relationship with leader effectiveness: A meta-analysis. *Proceeding of the academy of management* 201-205.

Olatoye, R.A and Afuwape, M.O. (2004), Student Integrated science Achievement as a predictor of later Achievement in Biology, Chemistry and Physiscs. *Journal of the Science Teachers Association of Nigeria* vol.39 (1&2) 10-16.

Oludipe, D.I. (2000) Topic Difficulties in Junior Secondary School Integrated Science Curriculum. *Journal of Education of Focus, No. 1,* pg 113-121.

Olugbuyi O.T (2009). Emotional Value Judgment and Achievement in Integrated Science An unpublished B.Sc (Ed) project. Olabisi Onabanjo University. Ago-Iwoye, Ogun State, Nigeria.

Onabanjo C.F. and Famuyiwa O.O. (2004). Strategy for studying and passing Mathematics Examination. In *Issues in Educational Measurement and Evaluation in Nigeria*. Educational Research and study Group Institute of Education, University of Ibadan, Nigeria.

Oshin , T.A (1991). The relationship between achievement, motivation, test anxiety and biology performance. *B.Sc project*, Olabisi Onabanjo University, Ago-Iwoye, Pg. 20-23.

