UNIVERSITY FOR DEVELOPMENT STUDIES

FACULTY OF MATHEMATICAL SCIENCE

DEPARTMENT OF STATISTICS

STATISTICAL ANALYSIS OF THE INFLUENCE OF TEACHERS' MOOD ON THE ACADEMIC PERFORMANCE OF STUDENTS

 \mathbf{BY}

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(UDS/PAS/0009/14)

A TERM PAPER SUBMITTED TO THE DEPARTMENT OF STATISTICS,
UNIVERSITY FOR DEVELOPMENT STUDIES, NAVRONGO, IN PARTIAL
FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF
POST GRADUATE DIPLOMA IN
STATISTICS.

FEBRUARY, 2016

DECLARATION

CANDIDATE'S DECLARATION

Date:

I hereby declare that this term paper is the result of my own research and that no part of it has been presented for another degree in this University or elsewhere.

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I hereby declare that	the preparation and presentation of this term paper work was supervised
in accordance with g	guidelines on supervision of paper work laid down by the University for
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ABSTRACT

The study attempts to determine whether the mood of teachers have any direct bearing on the academic performance of students in class. The study area was Morso D/A J.H.S. A sample size of forty students from form two was used for the study. The affect theory by Tomkins and the behavioral theory by Bandura was adopted as framework for this study. The random sampling technique was employed to select the samples into two groups of students each comprising of twenty, the groups were taught based on negative or positive mood. In this research Two-Group Post-test was used. It aims to make causal relationship between the independent and the dependent variables. That is how mood relates to academic performance of students in class, being it positive or negative mood.

The post-test was used, that is the performance of students was measured after being taught a topic on integers under either negative or positive mood. The independent t-test was used to test the hypothesis and the finding of the study indicates that the mood of teachers when negative reflects a poorer performance than positive mood and the difference in performance was statistically significant.

ACKNOWLEDGEMENT

This work have been made possible due to the assistance of others. First and foremost, I owe much gratitude to the Almighty God for giving me the strength of knowledge to be what I am today. I say may His name be praised. Truly, He is the Supreme God.

Secondly, I wish to register my sincere gratitude to my supervisor, Mr. Suleman Nasiru for his immense guidance and tutelage as well as his precious time spent in reading and correcting the scripts to become a success. Without him, this could not have come to a reality.

Again, I would like to acknowledge my God sent parents, Mr. and Mrs. Ame-Bruce for their support and words of encouragement. Without them, I would not be able to reach this pedestal. I say God richly bless them.

I owe a word of gratitude to all my siblings for their source of encouragement and support to put together this work piece

Also not forgetting Mr. Anane Gideon for his time and words of encouragement to make this work come into fruition.

DEDICATION

Praise is the name of the Lord Almighty for the knowledge and wisdom given to me to undertake this research paper.

Secondly, to my beloved mother Mrs. Salomey Ame-Bruce, not forgetting you Mr. Isaac Appiah Nsiah for your unfailing support.

Finally, to all friends and loved ones.

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CHAPTER ONE

INTRODUCTION

Overview

This chapter entails the details to the study, statement of the problem, Aims of the study, significance of the study, statement of hypothesis, operational definitions, delimitation and limitations.

Background of the study

Education has now become one of the most vital and powerful tools for the success of every economy in the world. Over the years, the level of education and performance of students who are fortunate to have access to education nationwide has fallen. For instance, there was a recent publication on the fallen standard of education nationwide after the release of the 2013/2014 West African Examination Council (WAEC) results (Ghana News Agency, 2014). The problem is worse when compared to the educational levels of about twenty years ago. This gave rise to most researchers to research into the major factors leading to this decline of quality education. While there is clear evidence that teacher quality is a key determinant of student learning, little is known about which specific observable characteristics of teachers can account for this impact. (Aaronson, Barrow & Sander, 2007)

Over the years, school administrators, parents, and students themselves widely support the notion that the mood of teachers is very significant as far as student's performance in class is concerned. Researchers have proved but with little evidence that the characteristics of teachers do affect performance beyond reasonable doubt (Woolfolk, 2008)

Understanding the causes of student achievement is important and substantial not least concerning the long-term impact it will have on the nation's economy. For example, differences in educational performance can be accounted for when measured by student achievement tests (Hanushek and Woessmann 2009). A research conducted by Sanders and Hom revealed that the character of teachers can have impact on the performance of students (Sanders and Hom. 1997)

It is very important in education that an effective teacher needs to deem it necessary to keep the whole class and get them oriented towards classroom tasks. To create optimal environment for effective teaching and learning process, teachers need a repertoire of establishing procedures and good emotional states that promote good teacher-pupil relationship (Everton, Emmer and Worsham, 2006). According to Aber and Heward (2000), the systematic application of praise and attention may be the most powerful motivational and classroom management tool available to teachers. So, the mood of the teacher will determine the appropriate application of praise and attention in the classroom.

During the course of a day, favourable feedback from someone in authority makes a subordinate feel happy, harsh criticism may put one in a bad mood. It has been shown that mood is related to memory in such way that being in a positive mood helps people recall positive things, whereas being in negative mood helps people recall negative things. Being in a positive mood is likely to promote successful work performance because it encourages people to put in extra effort (Greenberg & Baron, 2008)

My questions now are, does the look and facial expression of teachers seem inviting to students?;

Does the mood of teachers have any psychological influence on students?;

and does the interaction level and humour staged by the teachers boost the participation of students in class?

1.1 Statement of the problem

Poor academic performance of students in Ghana has become a major concern in the educational sector. This has led to the fallen standard of education in Ghana. Overtime, pupils' academic performance in both internal and external examination has been used to determine excellence in teachers' and teaching practices and methodology (Ajao, 2001). Teachers have been shown to have important influence on students' academic achievement and they play a crucial role in educational attainment because the teacher is ultimately responsible for translating policy into action and principles based on practice during interaction with the students (Afe, 2001).

According to the behavioural school of psychology, one's behaviour is influenced by environment (Woolfolk, 2008). In line with this, teachers' mood can influence the mood of students. In other words, "infectious mood" such as positive and negative mood will have respective effects on students' mood. Thus, students who are affected by the positive mood of the teacher will display characteristics of positive mood such as being more companionable obliging and supportive of others in accomplishing goals.

On the other hand, students affected by the negative mood of the teacher will display negative mood patterns such as having greater difficulty in solving complicated problems, constrained information processing, and difficulty in decision making (Conway, 2003). The cause of poor performance of students and the fallen standard of education prompts the researcher to investigate if teachers' mood in the classroom settings has any direct bearing on the poor performance put up by students.

1.2Aims of the Study

- To find if the mood of teachers influence the mood of students.
- To investigate whether the mood of teachers affect students' academic performance in class.

1.4 Significance of the study

- Since education is a national issue, the study will serve as a guide to policy maker, governments, Academia, researchers and educationists in their quest to map up strategies to improve performance.
- Teachers will be equipped with better methods in the classroom to increase performance of pupils.

1.5 Statement of Hypothesis

The study will seek to investigate the null hypothesis below after completion:

 Negative mood of teachers is more likely to yield poor performance of pupils than positive mood.

1.6 Operational Definition

 Mood: the physical, emotional, facial expressions and type of interactions that are portrayed by the teacher while teaching.

- Positive Mood: mood that is, welcoming and having high level of interactions with students in the course of teaching. Examples are smile, humor and praising students who attempt answering question in class.
- Negative Mood: mood that is not welcoming, having low level of interactions with students. Examples are frowning, ignoring efforts made by students to answer questions, and making so many rules.
- Performance: the scores obtained by students in the test
- Better Performance: getting at least 6 marks or better in the test
- Low Performance: getting marks ranging from 0 and 5

1.7 Delimitation

The research was conducted on junior high school pupils and since not all junior high school pupils can be used to undertake the research, the research was conducted in Morso D/A J.H.S. And even with the Morso D/A J.H.S pupils in form two (2) were selected as a sample.

1.8 Limitations

This research cannot boast of perfection because the researcher faced some problems that were unavoidable. Some of these limitations include the use of deception, the use of small sample size and the use of a single test to measure the performance of students. In the case of deception, it has been employed as a result of the participants' initial unwillingness to take part in the experiment. The researcher was not apportioned adequate time to conduct the experiment. Thus, the researcher could not use the number of questions as proposed initially. Many school authorities were not willing to allow studies to be conducted in their schools

because of the fear that findings of the studies will reflect some elements of poor academic performance, which may indirectly mar the reputation of the school.

CHAPTER TWO

LITERATURE REVIEW

2.1 Theoretical framework

Affect theory proposed by Silvan Tomkins (1995) is a branch of psychoanalysis that attempt to organize effects into discreet categorical and connect each one with its typical response. For example, joy is observed through the reaction of smiling. These affects can be identified through immediate facial reactions that people have to stimulus, typically well before they could process any response to the stimulus (Greenberg and Baron, 2008). Mood is used to describe low intensity and relatively enduring affective states with no immediately salient antecedent cause and little cognitive content such as feeling bad or feeling good (Brown, 2006). It is clear that the mechanisms that mediate between affective states and the cognitive process involved in learning, performance and behaviour are of critical importance in both our private and our working lives (Brown, 2006)

The accuracy and efficiency of thinking processes, perceptions, and behaviour are significantly influenced by affective states, even mild and transient ones. Negative affective states for example have been found to produce low effort processing of information and the use of less complex semantic processing strategies. In contrast, positive affective states have been found to increase memory on various task and mastery of discrimination task. It is also found that positive affect facilitate complex cognitive functions that require flexibility, integration and utilization of cognitive materials (Schwartz, Wassman, And Robbins, 2002).

The social learning theory proposed by Albert Bandura (2000) has become perhaps the most influential theory of learning and development. Bandura believed that direct reinforcement could not account for all types of learning. His theory added a social element, arguing that people can learn new information and behaviours by watching other people. This is known as observational learning or modeling, this type of learning can be used to explain a variety of behaviour. In the line with this theory the behaviour displayed by teachers can invariably be imitated by students. According to Greenberg and Baron (2008). Negative mood such as anger causes one to display greater difficulty in solving complicated problems thus if students imitate this mood, they are likely to experience this difficulty which can affect their performance in class. A study was conducted and the findings suggested that humour produced psychological and physiological benefits that help students learn and perform well (Schwartz, Wasserman, And Robbins, 2002)

2.2 Review of related studies

In a research conducted by Lucy Le Mare and ElaheSohbat on "Canadian students' perceptions of teacher characteristics that support or inhibit help seeking" revealed that help interactions evoked strong feelings in students that related to how comfortable they were in seeking assistance from teachers. In this study, a sample size of one hundred and fifteen (115) was used where thirty-three children were in second and / or third grade (19 girls: mean = 8.89 years), 36 children were in fourth and / or fifth grade (17 girls; mean = 10.08 years) and 46 children were in sixth and / or seventh grade (18 girls; mean age = 12.42 years). Thirty – nine children had male teachers (N=5) and 76 had female teachers (N=12). Data as collected in two individual sessions by completing questionnaires concerning their likelihood of seeking help in math class, their altitude towards help seeking and their social orientations.

The results of this study indicate that mood did not have predominant effect on the performance of students in class (Chicago Journals, 2002).

In another study conducted by Aghruwheand Nkechi (2009), the results showed that effective teachers produced better performing students. However, the observed differences in students' performance were statistically not significant. This according to the researchers could be due to influence of student and school environment related factors that were not included in the study.

They concluded that teachers' effect is not the only determinant on students' academic achievement. This study was descriptive in nature and it involved 979 teachers' (460 males; 519 females) by stratified random sampling technique. Academic performance records of 50 students per teacher, which is 48,950 students' scores were also used. Questionnaires with their crombach's alphas were used to collect data and the hypotheses were tested as 0.05 level of significance using t-test and one-way ANOVA (Kamla-Raj, 2009).

Furthermore, Bryan, Mathur, and Sullivan (1996) conducted a research in "the impact of positive mood on learning". The objectives of this study were to examine the effects of a brief positive mood induction on a learning task that stimulates beginning reading acquisition and the durability of this effect across a period of two weeks. A sample size of 60 students, half average-achieving and half with learning disabilities were randomly assigned to either a positive or neutral mood induction condition in effort to control for effects of prior knowledge all students, received the instruction in elementary Hindi language on a series of five tasks. The instruction was re-administered in two weeks. The results indicated that both groups of students in the positive mood condition performed better than those in the neutral condition. This according to the researchers was not proved statistically. However, they indicated that the gain scores reflected that across a two-week period, students with learning

disabilities in the positive condition performed significantly better than students with learning disabilities in the neutral condition (Learning Disability Quarterly, 1996).

In addition to the above, a similar study was conducted by Asikhia O. A (2010) on students and teacher's perception of the causes of poor performance in Ogun State Secondary Schools; Implications for counseling for National Development. The study examined the perception of students on the causes of poor performance among secondary school students in Ogun state Nigeria. Subjects used were one hundred and thirty five students and fifty teachers drawn from five schools in Odogbolu Local Government Area of Ogun State; questionnaire was used to collect relevant data for the study. Percentages and chi-square were used to analyse the research question both responses from teachers and students indicated that teachers qualification and students environment influence students poor performance while teachers' method do not

Furthermore, another study of relevance to the current study was conducted by Arshad Dahar, Tahira Dahar and Ahmad Faizeon the impact of teacher quality on the academic achievement of students at secondary stages in Punjab (Pakistan). The study delimited its scope to the five indicators of teacher quality. That is academic and professional qualities, in service training, refresher courses teacher experience and teacher salary. Population of the study comprised all secondary and higher secondary schools, teachers as well as students. Overall 28 schools, 20 students and 10 teachers from each school were randomly selected as the sample of the study. The study used questionnaire to collect data on the teacher qualities. The longitudinal data of academic achievement in the form of aggregate marks of the annual examinations of the class. The data were analysed at school level and summarized at regression analysis with linear function was used to find out the differential impact of teacher quality on the academic

achievement. The study found that there was no much difference in the quality of teachers of schools with higher academic achievement and found that there was no much difference in the quality of teachers of schools with higher academic achievement and that of school with lower academic achievement and found that the five indicators of teacher quality was not effective but rather the attitude of teachers is important.

To add more to the above, Yara and Olatunde (2009) conducted a study on the relationship between teachers' attitude and students' academic achievement in mathematics in some selected schools in south western Nigeria. The study found out the relationship among teachers' attitude and students' academic achievement in secondary school mathematics. The study is an ex-post facto type which adopted descriptive survey design. The subjects for the study were on one thousand five hundred and forty two senior secondary two secondary schools from each of the six senatorial districts in the south western part of Nigeria. The data were analyzed using simple frequency and percentage. The findings revealed that there was good and positive attitude of teachers towards teaching of mathematics and how well students performed in class.

Besides, another study conducted by Linver, Davis-Kean, and Eccles (2002) on the influence of gender on academic achievement revealed that younger women performed better than younger men in math test. This study was a longitudinal research originally designed to measure the influence of school transition and family environment on early adolescent interest motivation, and achievement related self-concepts. Originally, the sample included students from 12 schools. However, three of these schools did not participate after seventh grade. The sample included 1821 adolescents. All participants in the study comprised students from elementary to junior high school between the 6th and 7th grades. The

participants were predominantly white (92.2%) and from working to meddle class families. Measures in the study included school grades, adolescent interest in math, score on a standardized math test from seventh grades, teachers' perception on adolescents' effort in math, math class track, adolescent gender, and mothers' level of education. Their grades for every semester were recorded over the number of years used for the study. Math school trajectories and math interest trajectories were used to analyze the results (Linver, Davis-Kean and Eccles, 2002).

In addition Dayioglu and Turut-Asik conducted a research on the gender differences in academic performance in a large public university in Turkey. Cumulative grade point average (CGPA) was used to measure the academic success of the participants at different stages of their academic life. The study considered sex as the variable of interest; to see whether females have an advantage over males. A multivariate test was used to analyze the results and other possible predictors of CGPA were controlled. The findings of the study revealed that female students significantly outperform their male counterparts in all the four schools that they considered Dayioglu and Turut-Asik (2004).

Gender difference in educational outcomes were examined by Fergusson and Horwood (1997) in a birth cohort of over 1,000 Christ church born children studied from the point of school entry to the age of 18. The data analyzed in the study were gathered over the course of the Christchurch Health and Development Study. The study was a longitudinal research of a birth cohort of 1,265 Christchurch born children that had been studied from birth to the age of 18 years using a combination of data collection methods including parental interviews, teacher assessments, standardized testing and interviews with the children. At the time of the analysis of the data, the samples reduced to sizes ranged from as high as 1110 to as low as 784. The results of the study revealed that there was significant better female achievement compared to that of males.

2.3 Rationale

Many studies had been conducted concerning teachers' observable characteristics and its effects on students' academic performance. With Mare and Sohbat's study. 115 students were used for the study out of population size of 150,000 making it representative to some extent. However, in the sampling, females were more represented in the studies more than males (Chicago Journal, 2002). Results can therefore not be generalized to both sexes since the female population could have played a predominant role in results attained. In addition, the study was not an experiment where extraneous variables were more likely not to be constant.

Concerning the study carried out by Aghruwhe and Nkechi (2009), it was carried out in the Nigerian setting (Kamla-Raj, 2009). This study is intended to be carried out in the Ghanaian setting to examine if the results will be in line with theirs. In the case of Bryan Mathur and Sullivan (1996), positive and neutral mood were used to examine their effects on learning task and the durability of these effects within two weeks. Their study was positive and neutral without considering the influence of negative mood as well. Therefore, this study will introduce negative mood against positive mood.

With reference to the studies discussed above, this current study primarily intends to find the relationship between the mood teachers' display in class and the academic performance of the students. This is because according to Greenberg and Baron (2008), affective states of teachers and significant others influence children' performance and information processing.

Furthermore, this current study intends to adopt experimental design to ascertain if the results will support their findings of the previous studies which adopted survey. In addition, gender equality will be taken in to consideration in order to find out if there was going to be difference between their results.

In relation to the above, Olatunde and Yaras' study on the relationship among teachers' attitude and students' academic achievement in selected senior secondary school mathematics. Their study adopted the descriptive survey design and was conducted in Nigeria and the findings revealed that there was good and positive attitude of teachers towards teaching of mathematics and how well students performed in class. Thus this study therefore focused on an aspect of teachers' attitude which is the mood of teachers and conducted it in the Ghanaian setting and employed the experimental design to find out the extent to which the results would be replicated, gender was also considered in the current study.

Also, the study conducted by Dahar et al (2001), on the impact of teacher quality, focused on indicators such as experience and refresher courses and used questionnaire to collect the data longitudinal data of academic achievement in the form of aggregate marks of the annual examination of the class was used and the findings of the results points to the fact that the attitude of teachers in class to a very large extent is very important to the performance of students in class, therefore the current study sought to examine how well the attitude of teachers specifically their mood play an important role in the success of students in the Ghanaian context.

In addition to the above, Linver et al (2002) also conducted a study that measured the academic performance of younger women as against younger male students. Their study was longitudinal and concentrated on a large sample size. The participants used were predominantly whites. They focused on young men and women and the extent to which one sex will outperform the other. The current study on the other hand used an experimental method as against their longitudinal method to ascertain whether the result got the previous study will be replicated in this current study. This study introduced all blacks to find out if there was going to be some level of agreement to their findings when introduced in the African settings.

Also, Dayioglu et al (2004) conducted a similar study in Turkey and considered sex as a variable of interest to see whether females have advantage over males. Findings revealed that females have advantage over males. Therefore, this study introduces the Ghanaian setting to investigate whether the findings got in Turkey would be replicated. The previous study does not put into consideration the mood of teachers and its impact on the academic performance of students in line with their sex, this study therefore adopted this approach to know if the earlier results will be replicated irrespective of the mood of teachers.

Moreover, Fergusson and Horwood (1997) conducted a research which was longitudinal and collected the data based on parental interviews, teacher assessment, standardized testing and interviews of children and came out with findings which indicated that females performed better significantly than males, thus the current study sought to focus mainly on the mood of teachers and employed a field experiment as against their longitudinal study, in order to ascertain the extent to which their results would agree with the current study.

CHAPTER THREE

METHODOLOGY

3.1 Research design

In this research Two-Group Post-test was used. This is because it involved simple random selection and assignment, post-test, two experimental groups with each serving as a control for the other but no pre-test. It aims to make causal relationship between the independent and the dependent variables. That is how mood relates to academic performance of students in class, being it positive or negative mood.

3.2 Participants

The researcher employed the convenience sampling technique to select one school that is Morso D/A Junior High School that was willing to participate in the study after a letter had been sent to 3 schools seeking for approval. Forty (40) participants were randomly chosen for the study, comprising both females and males from the Junior High School form two as a sample to represent the whole class. Their ages ranged from 12 to 15 years old. Two research assistants were well trained to serve as confederates to display both moods. Confederates were randomly picked to act. Pupils were taught based on the mood selected by them and their performance were measured based on a test on integers after the lesson. The teachers employed the mood patterns characterized as "positive mood" while teaching pupils under positive mood and "negative mood" in the course of teaching those selected for negative mood and learning process.

3.3 Sampling technique

Simple random sampling was used to select 40 pupils out of 50 pupils in form two of Morso D/A J.H.S. Also, random assignment was used to assign participants into the two groups namely "positive and negative moods".

3.4 Instruments

The teachers (confederates) were provided with relevant teaching and learning materials such as Aki-Ola mathematics test book for junior high schools and markers to teach the pupils a topic on integers. Pupils were given pens and examinations papers to take a test after the lesson. The test comprised 10 items.

Example:

1.
$$-2 \times -2 \times -3 \times 2$$
 is equal to

- a. 24
- b. 12
- c. -12
- d. -24

3.5 Scoring

Pupils were provided with 10 questions comprising of 10 multiple-choice questions. Pupils were required to select or provide the correct answers without showing any working. Each correct answer attracted 1 mark thus attracting 10 marks in all. Marks ranging from 0 to 5 were referred to as low performance while marks above 5 were referred to as better performance.

3.6 Procedure

Permission was sought from the head-teacher of Morso D/A J.H.S School. The confederates were required to sign a consent form. There was a population of fifty students in the form two class, pupils were randomly selected and assigned into two groups (positive and negative). In the randomization, all the pupils in the class were made to pick folded pieces of papers numbered from one up to fifty. Those who picked papers numbered one up to forty were selected as sample. These pupils were then directed to pick another paper having positive and negative. There were 20 positive and 20 negative sheets of papers in all. One was therefore assigned to the group for which he picked. The researcher did not disclose the main purpose of the study to the students in order to control response bias. The students were debriefed after the use of deception.

CHAPTER FOUR

ANALYSIS OF DATA

4.1 Results

Table 1: Descriptive Statistics

	Level	N	Mean	SD
Mood	Positive	20	6.30	0.32
	Negative	20	3.30	0.43

From the descriptive statistics table above, 50% of the participants were in the positive mood and the remaining 50% were under negative mood. The mean of the positive group is 6.30 with standard deviation 0.32 while the mean of the negative group is 3.30 with standard deviation of 0.43.

4.2 Hypothesis Testing

The hypothesis; Negative mood of teachers is more likely to yield poor performance of pupils than positive mood. An independent t – test was used to test this hypothesis. The results revealed that there was statistically significant difference between the performance of pupils taught under positive and negative mood. The table below shows the summary of the analysis.

Table 2: Independent t test showing the mean difference of pupils taught under positive mood and negative mood.

Group	Negative	Positive	Т	P (level of
	Mood (n = 20)	Mood (n = 20)		significance)
Mean	3.30	6.30		
			5.617	0.00
Standard	1.92	1.42		(two-tailed)
Deviation				

The results show that the group means are significantly different because the value in the "Sig. (2-tailed)" column is less than 0.05, that is p value 0.00 < 0.05 (alpha level) and t value (df = 38) = 5.617. Thus, hypothesis is supported hence pupils taught under negative mood significantly perform poorer than pupils taught under positive mood.

4. 3 Summary of the results

The analyses of the results show that the hypothesis of the study is supported. It has been revealed that there were some differences between the performances of the variables involved that is positive mood compared to negative mood. As indicated by the hypothesis of the study, there is statistically significant difference in performance of pupils taught under positive mood and negative mood.

CHAPTER FIVE

DISCUSSION, RECOMMENDATION, SUMMARY AND CONCLUSION

5.1 Discussion

The performance of every individual is not equal. There is a lot of variability and dispersion. The variability cannot be attributed to a single factor, but it is the outcomes of number of factors as intelligence, study habits, self-concept, creativity, aptitude interests, socio economic factors, and area. Along with these, gender of the child is also an influencing factor on Academic achievement of the child. In this study, the researcher examined how the mood of teachers affect the academic performance of the students, the role that sex plays in the assimilation and the mood of teachers and the extent to which these combine to contribute to the kind of performance put up in class. The study employed two theories. That is, the affect theory proposed by Silvan Tomkins (1995) states that positive affect facilitates complex cognitive functions that require flexibility. Integration and utilization of cognitive materials, thus, enhancing better performance and this explains the fact that one would be able to pull outstanding performances in every sphere of life including academia when found in a positive state or mood.

The findings of this study somehow agree to the assumptions of the affect theory, that is, students taught based on positive mood did better than students based on negative mood. Social learning theory proposed by Albert Bandura (2000) states that observational learning or modeling affects performance to some extent. That is, the mood of the teacher can be modeled by the students; when the students tend to model negative affect of a teacher, it may cause them to display greater difficulty in solving complicated problems whereas when

students model positive affect of the teacher, it will lead to the students having better control in solving complicated problems.

Also, the study of Bryan, Mathur and Sullivan (1996) with the findings of this study as it has been indicated in their earlier study that students who were taught under positive mood performed better than students who were taught under neutral mood which is consistent with the current study.

To add to the above, the study conducted by Dahar et all is consistent with the current study, that is their work emphasized that the attitude of teachers was very relevant in the performance of students in class.

5.2 Recommendation

A different methodology can be employed in future studies based on the current or similar study to see if the results got in this study can be replicated. Instead of an experiment, a survey can be used to target a larger sample size which can be more generalized. Furthermore, this study can be replicated using a correlational study in terms of the settings. That is, urban-rural settings can be compared to ascertain the impact of environmental influence on the mood of the teacher and its implications on the academic performance of students. Moreover, future researchers should also focus on some other factors that have potential influence on the academic performance of students rather than on the aspects related to the teacher. Besides, school administrators and the Ghana education service need to create a system whereby room will be made for intelligence tests to be conducted before admission. These tests will help the teacher teach within the zone of proximal development of the learners.

5.3 Summary and Conclusion

The academic performance of pupils cannot be solely attributed to the mood of the teacher in the classroom. The environment as well as the biological make-up of pupils also plays a role in the success of pupils in class or how well pupils perform in class. However, the mood of a teacher plays a predominant role in the performance of pupils in class.

Based on the study, the researcher can conclude that the stakeholders and policy makers in the education sector should focus more importantly on the mood of a teacher and other relevant factors that have the tendency of influencing the academic performance of students.

References

Aaronson, Daniel, Lisa Barrow, William Sender (2007). Teachers and Student Achievement in the Chicago Public High Schools. *Journal of Labor Economics* 25 (1), pp. 95 – 135.

Afe, J.O. (2001). Reflection on Becoming a Teacher and the Challenge of Teacher Education. *Inaugural Lecture Series 64*. Benin City; University of Benin Nigeria.

Ajao, W. (2001), Cadbury is Determined to Move Education Forward. *Vanguard*, December 27, 2001, p. 16

Alber. S. R. & W.L. (2000). Teaching students to recruit positive attention: A review and recommendations. Journal of Behavioral Education, 10, 177-204.

Bandura, A. (2000). Social Cognitive Theory: An Agentic Perspective. Annual Review of Psychology, 52, 1-25 (p. 55).

Bless. H. (2001). Mood and the use of general knowledge structures, *Theories of mood and cognition*. New Jersey: pp. 9-26.

Brehm, J.W. (1999). The intensity of emotion. *Personality and Social Psychology Review*, pp. 2 –

Brown, J. D. (2006). Social psychology. New York: McGraw-Hill

Conway, P. F. & Clark, C. M (2003). The journal inward and outward: A re-examination of Fuller's concerns-based model of teacher development. *Teaching and Teacher Education* 19. P. 465-482.

Diener, E. & Diener, M. (1995). Cross-cultural and Self-esteem. Journal of personality.

Evertson, C. M., Emmer, E. T. & Worsham, M. E (2006). Classroom management for elementary teachers (7th ed.). Boston: Allyn & Bacon.

Greenberg, J. & Baron, A. R. (2008). Behaviour in Organizations. (9th ed.). New Jersey: Pearson Education, Inc.

Hanushek, Eric A., Steven G. Rivkin (2006). Teacher Quality. In Eric A. Hanushek, Finis Welch (eds.) *Handbook of the Economics of Education*, Volume 2, pp. 1051-1078. Amsterdam: North-Holland.

Hanushek, Eric A., Ludger Woessmann (2009). Schooling, Cognitive Skills, and the Latin ISODEC (2011). Ghana News Agency: Weak supervision destroying quality of Ghana's public education. Date: April 26, 2011.

Rivkin, Steven G., Eric A. Hanushek, John F. Kain (2005). Teachers, Schools, and Academic Achievment. *Econometrica* 73 (2), pp. 417-458.

Rockoff, Jonah E. (2004). The impact of Individual Teachers on Student Achievement: Evidence from Panel Data. American Economic Review 94 (2), pp. 247-252.

Sanders, W., Wright, W., & Horn, S. (1997). Teacher and classroom context effects on students achievement: Implications for teacher evaluation, *Journal of Personnel Evaluation* in Education, 4(1), 3-7.

Schwartz, B & Wasserman, E. A. & Robbins, S. J. (2002). Psychology of Learning and Behavior (5th ed.) New York: W. W Norton.

Tomkins, S. S. (1995). Exploring affect, the selected writing of S.S. Tomkins, E. V. Demos (ED.) New York: Cambridge University Press.

Wollfolk, A. (2008). Educational psychology: Active Learning Edition. Boston: Pearson Education, Inc.

APPENDICES

	(d) undefined
2.	-10 + (-6) is equal to (a) 4 (b) 16 (c) -16 (d) -4
3.	-3 × 6 × 2 × -1 is equal to (a) 18 (b) -18 (c) 36 (d) -36
4.	$(-2 \times -2)(-3 \times 2)$ is equal to. (a) 24 (b) 12 (c) -12 (d) -24
5.	Which of the following is an integer? (a) $\frac{4}{3}$

Circle the correct answer from the options provided

1. $\frac{0}{8}$ is equal to

Name:

Sex:

Section A

(a) 0

(b) 4

(c) infinity

- (b) $\sqrt{2}$
- (c) -5
- (d) 3.1234
- 6. $\frac{-8}{-2}$ is equal to
 - (a) -4
 - (b) 2
 - (c) 8
 - (d) not possible
- 7. -2 + (3 (-4)) is equal to
 - (a) -3
 - (b) 5
 - (c) 7
 - (d) 4
- 8. $\frac{0}{4}$ is equal to
 - (a) 0
 - (b) infinity
 - (c) not possible
 - (d) 4
- 9. Any even number multiplied by any odd number will always be equal to even number True or False
- 10. Evaluate $\frac{12}{-2} + 3 \times 4$
 - (a) 12
 - (b) -12
 - (c) -6
 - (d) 6

Raw Score

No. of pupils in positive group	Marks (x)	No. of pupils in negative group	Marks(x)
1	6	1	2
2	9	2	4
3	4	3	7
4	6	4	2
5	5	5	1
6	6	6	7
7	5	7	6
8	8	8	1
9	6	9	1
10	5	10	4
11	3	11	4
12	7	12	2
13	7	13	3
14	7	14	3
15	8	15	2
16	7	16	2
17	7	17	6
18	7	18	3
19	6	19	2
20	7	20	4

 $\sum x = 126 \qquad \qquad \sum x = 66$

Mean of positive group =
$$\frac{126}{20}$$
 = 6.3

Mean of negative group
$$\frac{66}{20} = 3.3$$