

INFLUENCE OF PUPIL-TEACHER ATTACHMENT PATTERNS ON ACADEMIC ACHIEVEMENT OF PRIMARY SCHOOL PUPILS IN RIVERS STATE

By

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Abstract

The study investigated the influence of pupil-teacher attachment patterns on academic achievement of primary school pupils in Rivers State. The population of the study consist of all primary six pupils in Rivers State. Multi-stage sampling technique was used to draw a sample of 1000 pupils from the population. The instruments for data collection were self-designed pupil-teacher attachment pattern questionnaire (PTAPQ), Mathematics Achievement Test (MAT) and English Achievement Test (EAT). The instruments were validated by experts in measurement and evaluation. The reliability of Pupil-Teacher Attachment Pattern Questionnaire (PTAPQ) was determined through Cronbach Alpha method of estimating reliability while Mathematics and English achievement test reliability were determined through Kuder – Richardson K-20. The reliability coefficient for PTAPQ is 0.84, MAT 0.94 and EAT 0.96 respectively. Three research questions and three hypotheses were formulated to guide the conduct of the study. Mean and standard deviation were used to answer research questions while Two-way Anova was employed to test the hypotheses. The results indicated that there is a significant influence of pupil-teacher attachment patterns on pupils' academic achievement, that there is no significant influence of pupil-teacher attachment pattern on pupils' academic achievement based on gender and there is no significant interaction effect of pupil-teacher attachment patterns and gender on pupils' academic achievement. Based on the findings, recommendations were made, the researcher recommended that teachers should establish pupil-teacher attachment pattern with all pupils irrespective of gender.

Keywords: Pupil-teacher attachment patterns, academic achievement, secure attachment, avoidant attachment, disorganized attachment, ambivalent attachment pattern.

Introduction

Academic achievement refers to the outcome of an educational endeavour which is measured through test and continuous assessment. It is progressive and calculative. It is perceived as the accomplishment of objective in education. Educational achievement has been recognized as a source of development in economic, political, social and human resources. However, pupils' academic achievement over the years has been generally poor and on steady decline. Ebeku in Orluwene and Bright (2012) observed that academic achievement of

students at various levels of education has degenerated and this situation has posed a source of concern to administrators, government and teachers. Iwundu (2001) defined academic achievement as the degree or level of success attained at the end of an academic endeavour. Most educational problems are traced to poor foundation at the primary level. The above situation may be connected to insecure attachment patterns between teachers and pupils.

The concept of attachment has triggered many approaches. These approaches have evolved over time.

Ainsworth (1989) was the first American-Canadian psychologist that stated that attachment between a child and care giver could influence the child's emotional relationship in future. She developed a tool for assessing attachment that is known as the strange situation procedure. From the result of the experiment conducted she was able to categorize attachment into four different types such as the secure attachment pattern, avoidant attachment patterns, disorganized attachment pattern and anxious attachment pattern.

Secure attachment pattern is characterized by a feeling of security in the presence of the caregiver. The child is visibly upset and experience distress in the absence of the caregiver because of the bond that has been established. Responsiveness is a key characteristic of secure attachment pattern. The needs of the child are met consistently and the caregiver is able to interpret the child's signals and respond accurately. Teachers who have established a secure attachment pattern with their pupils are supportive, encouraging and reassuring. The child's feelings, perspective and wellbeing are considered before making any decision. This relationship culminates to trust, high self-esteem, social competence and confidence in subsequent relationships. Conversely avoidant attachment pattern is characterized by a feeling of indifference between a caregiver and a complete stranger. This indicate that there is no preference for the caregiver. The behavior is connected to caregiver's insensitivity and lack of responsiveness to the needs of the child. Avoidant attachment pattern is a reaction to negative emotion such as rejection, feeling of abandonment and anger. Ainsworth described ambivalent attachment pattern as when there is inconsistent pattern of responding to the child's need. Children with the attachment pattern express distress when separated from the caregiver but are not comforted

when reunited with the caregiver. Ambivalent attachment pattern develop when teachers are inconsistent in meeting pupils' needs.

Disorganized attachment pattern is borne out of abuse and traumatic experiences during childhood. It is triggered by caregivers being insensitive to the needs of the child, Such children are frightened and skeptical about the teacher. They express disorganized, distressing and unpredictable behavioural pattern. They are very sensitive to criticism, controlling behavior and they are easily overwhelmed (Bergin & Bergin 2009).

Attachment is defined as an enduring psychological connection between individuals. He also noted that attachment may not be reciprocated by the other individual. Children seek proximity to the attachment figure and feel agitated or threatened in the absence of the caregiver. Attachment requires the caregiver to respond appropriately to the demands of the child. Secondly, being sensitive to the child's needs are key in the formation of attachment relationship. John Bowlby stated that parent-child attachment has the capacity of influencing other relationships. Noddings (1989) stated that it is the responsibility of schools to provide care for the children. She argued that it is morally and practically wrong to emphasize solely on academic achievement as opposed to pupil-teacher attachment. She noted that if teachers are responsive to pupils needs consistently, it could improve their academic performance. However in most primary schools, teachers are not attached to their pupil, as such it is difficult to identify pupils' academic, social and emotional challenges. In some primary schools, the relationship that exists between a pupil and a teacher is limited to knowing the name of their pupil for the purpose of identification.

This situation poses as an obstacle towards attainment of a common goal

which is academic achievement. Several studies have highlighted the importance of pupil-teacher attachment patterns on students' emotional and social competence. However, adequate attention has not been given to attachment and pupils' academic achievement. Teachers are in a position of care givers based on the principle of attachment, because pupils spend 5-6 hours a day in school. Secure attachment could enable teachers to identify pupils' academic challenges and respond proactively to their needs. Attachment relationship could also provide the needed boost for pupils to explore and become well integrated in the learning environment.

Attachment has been identified as an inexpensive but effective method that could improve students' academic achievement. Wendel (2002) noted that solely improving students' attachment with teachers may not influence academic achievement, however, pupils that have established positive relationship with their teachers are likely to communicate more effectively. They feel free to share their problems with their teachers and display better behavior in the classroom. Furthermore, they make themselves available for guidance and counseling services.

Brian (2011) described attachment relationship between a pupil and a teacher in the following ways: Pupils who are securely attached to their teachers share problems they are experiencing at home with their teachers, when they experience bullying at school, they approach their teachers to confide in them because the teacher is approachable and accessible. Ekeh (2012) investigated children's attachment patterns, academic achievement and social competence at early childhood using a sample of 280 pupils, selected through simple random and purposive sampling technique from a population of 822 pupils in all the

government approved nursery schools in Owerri. The instruments used for data collection were attachment style assessment scale and social competence ratio scale. The instruments were validated by experts in measurement and evaluation. Their reliability coefficient is 0.71 for (ASAS) and 0.83 were established through test, re-test method of establishing reliability. The result indicated that attachment influences academic achievement and social competence.

In the same vein, Sayedi, Lazdianbakhsh and Karami (2017) carried out a study titled the relationship between attachment style, self-regulation and academic achievement of students using a sample of 248 students drawn from a population of 700 students which were selected through cluster and multi-stage sampling technique. The instruments used for data collection were Boufland self-regulation in learning and attachment scale, Pearson moment correlation coefficient was used for data analysis. The result indicated that there is a significant relationship between secure attachment style and academic achievement. The result further showed that there is a significant relationship between self-regulation and academic achievement. Interestingly, Kenneth and Teddi (2002) examined attachment to parents and academic achievement in a multi-ethnic sample of college students. The result indicated that there is a significant relationship between parental attachment and academic achievement. Based on the foregoing, the aim of this study is to investigate the influence of Pupil-Teacher attachment patterns on Academic Achievement of Primary School Pupils in Rivers State.

Statement of the problem

In recent times, there has been steady decline in the academic performance of pupils in primary schools in Rivers State.

This could be attributed to lack of awareness on the role of attachment in the teaching and learning process. Efforts made by government, corporate organizations and individual are directed towards infrastructure, curriculum development, improving learning environment and increased funding of education as opposed to encouraging or to secure pupil-teacher attachment. The resultant effect is poor academic achievement which is transferred to other levels of education. Poor academic achievement culminates to other problems that are detrimental to the society such as juvenile delinquency, increase in the rate of crime, kidnapping, high rate of school dropout, prostitution and other social vices. It is probable that this situation could be avoided if better and improved relationship exists between teachers and pupils.

Given this situation, the problem of the study therefore is, what is the influence of pupil-teacher attachment patterns on pupils' academic achievement?

Research Questions

Three research questions guided the study:

1. What is the influence of pupil-teacher attachment patterns (secure, ambivalent, avoidant and disorganized) on pupils' academic achievement?
2. What is the influence of pupil-teacher attachment patterns (secure, ambivalent, avoidant and disorganized) on pupils' academic achievement based on gender?
3. What is the interaction effect of pupil-teacher attachment patterns (secure, ambivalent, avoidant and disorganized) and gender on pupils' academic achievement?

Hypotheses

The following null hypotheses have been formulated for the study:

1. There is no significant influence of pupil-teacher attachment patterns

(secure ambivalent, avoidant and disorganized) on pupils academic achievement.

2. There is no significant influence of pupil-teacher attachment patterns (secure, ambivalent, avoidant and disorganised) on pupils' academic achievement based on gender.
3. There is no significant interaction effect of pupil-teacher attachment patterns and gender on pupil academic achievement.

Methods

Expost facto research design was used for the study. This design involved collecting and analyzing data from variables which are already in place without manipulating such variables (Nwankwo 2006). In the same vein, Nworgu(2006) remarked that the researcher usually has no control over the variable of interest as such cannot manipulate them.

The population of the study consists of forty-nine thousand, six hundred and thirty-two (49,632) primary six pupils in Rivers State. Using multi-stage sampling technique, such as simple random sampling technique and non-proportionate stratified random sampling technique 1,000 pupils were drawn from the population.

Data was generated using a self-designed instrument with modified Likert scale titled pupil-teacher attachment pattern question (PTAPQ), which was used to elicit information on pupil-teacher attachment patterns. Academic achievement was measured with Mathematics Achievement Test (MAT) and English Language Achievement Test (EAT) results respectively.

Face and content validation was established in the study, professionals in measurement and evaluation vetted the items on the questionnaire and considered them suitable for the study, the reliability (PTAPQ) was established through

Cronbach Alpha method of estimating reliability. There liability coefficient is 0.84. Kuder Richardson was used to estimate reliability for Mathematics and English achievement Tests the reliability values for Mathematics was 0.94 and English Language is 0.96 respectively.

These values for Mathematics and English achievement tests were adequate for the instrument to be considered reliable. Mean and standard deviation were used to answer the research questions, while the hypotheses were tested using two-way Anova.

Results

Data presented in the study were based on the results of research questions answered and the tested hypotheses.

Research Question One

What is the influence of pupil-teacher attachment patterns (secure, ambivalent, avoidant and disorganized) on pupils' academic achievement?

Table 1: Mean Standard Deviation of the Influence of Pupil-Teacher attachment Patterns

Group	N	Mean	SD
Disorganized	188	45.82	15.44
Avoidant	302	47.42	16.46
Secure	363	53.02	15.75
Ambivalent	147	50.81	17.11

Based on the result it is deduced that the pupils on secure attachment pattern had the highest achievement mean score

followed by ambivalent, avoidant and disorganized attachment pattern.

Research Question Two

What is the influence of pupil-teacher attachment patterns (secure, ambivalent avoidant and disorganized) on pupils' academic achievement based on gender?

Research Question Three. What is the interaction effect of pupil-teacher attachment patterns (secure, ambivalent, avoidant and disorganized) and gender on pupils' academic achievement?

Table 2: Mean and standard deviation of academic of pupil based on attachment pattern and gender

Group	Gender	N	Mean	SD
Ambivalent	Male	103	44.55	16.05
	Female	85	47.35	14.61
	Total	188	45.82	15.44
Disorganized	Male	159	48.43	15.63
	Female	143	46.29	17.32
	Total	3.2	47.42	16.46
Secure	Male	199	51.35	15.75
	Female	164	55.04	15.57
	Total	363	53.02	15.75
Avoidant	Male	81	50.25	17.35
	Female	66	51.50	16.94
	Total	147	50.81	17.11

Research questions 1, 2 and 3 were answered using mean and standard deviation based on the students' pupil-teacher attachment patterns and gender. The results are presented in the same table 1.

The result revealed that male pupils of ambivalent attachment pattern had a mean score of 44.55 and the standard deviation of 16.05. The result further indicate that female pupil had a mean score of 47.35 and standard deviation of 14.61. For the disorganized attachment patter, the male had a mean academic achievement score of 48.43, while the female had a mean score of 46.29, their standard deviation are 15.63 and 17.32 respectively, the result further indicate that the male had a higher

mean score than their female counterpart with a difference of 2.14.

In the secure attachment pattern, the male had a mean academic achievement score of 51.35 while the female had 55.04. Their standard deviations are 15.75 and 15.57 respectively. The result showed that the females had a higher mean score than the male with a mean difference of 3.49. For the avoidant attachment pattern, the result revealed that the males had a mean score of 50.25, while the females had a mean score of 51.50 their standard deviations are 17.35 and 16.94 respectively. The result indicated that the female had a higher mean score than their male counterpart by a difference of 1.25.

Hypothesis 1

There is no significant influence of pupil-teacher attachment patterns (secure ambivalent, avoidant and disorganized) on pupils academic achievement.

Hypothesis 2

There is no significant influence of pupil-teacher attachment patterns (secure, ambivalent, avoidant and disorganised) on pupils' academic achievement based on gender.

Hypothesis 3

There is no significant interaction effect of pupil-teacher attachment pattern and gender on pupils' academic achievement.

Table 3: The three hypotheses stated in null form are tested using analysis of variance (2-way ANOVA)

Source	Type/sum of square	Df	Mean Square	f-value	Significant
Pupil-Teacher attachment pattern	8854.89	3	2951.63	11.40	0.000
Gender	429.62	1	429.62	1.66	0.198
PTAQX gender	1506.20	3	502.07	1.94	0.12
Error (within)	256,744.79	992	258.82	0	0
Total	267,535.5	999	4142.14	15	0.318

The result shows that the calculated f-ratio value of 11.40 for pupil-teacher attachment pattern was significant at 0.000 level which is lower than the 0.05 level of significance. Hence, the null hypothesis was rejected, indicating that there is a significant influence of pupil-teacher attachment patterns on pupils' academic achievement. The table also shows that the calculated f-ratio for gender at 1.66 was significant at 0.198 level, which is higher. Therefore the null hypothesis is accepted indicating that the influence of pupil teacher attachment pattern on pupil academic achievement is not significant due to gender.

The table further shows that the calculated f-ratio at 1.94 for the interaction effect of pupil-teacher attachment patterns and f-ratio was significant at 0.12 level which is higher than the chosen 0.05 level of probability, thus there is no interaction effect between pupil-teacher attachment patterns and gender on pupils' academic achievement. However, since this is a significant influence on pupil-teacher attachment pattern on pupils' academic achievement there is need to determine the direction of the significance and their influence. This was done using Scheffe test of multiple comparison. After the Analysis the results obtained were presented below.

Table 4: Scheffe Test showing the direction of significance difference in the influence of pupil-teacher attachment pattern on pupil academic achievement

Groups	Mean diff.	Significant	Result
Ambivalent and Disorganized	-1.60	0.767	Not significant
Ambivalent and Secure	-7.20	0.000	Significant
Ambivalent and Avoidant	-4.990	0.05	Significant
Disorganized and Secure	5.599	0.000	Significant
Disorganized and Avoidant	-3.39	0.222	Not significant
Avoidant and Secure	1.573	0.579	Not significant

The result on the table above indicate that the mean differences obtained when the groups ambivalent and disorganized, disorganized and avoidant ambivalent and avoidant and avoidant and secure were

compared they were not found significant. This is because their mean difference were significant at 0.767, 0.222, 0.579 and 0.048 respectively which are higher than the chosen 0.05 level of probability, hence

the direction of the significant difference in the influence of pupil-teacher attachment pattern did not come from them.

The table also revealed the mean difference obtained when ambivalent and secure, disorganized and secure were compared, they were significant at 0.000 and 0.000 respectively which is lower than the chosen level of probability. Thus the direction of significant difference of pupil-teacher attachment pattern on pupils' academic achievement came from them.

Discussion

The results of the research questions answered and hypotheses tested is the basic of discussion in the study.

The result revealed that pupil-teacher attachment pattern influence pupils' academic achievement when analysis of variance statistics was applied the f-value of 11.40 was found to be statistically significant at 0.05 level of probability which implies that pupil-teacher attachment pattern has a significant influence on pupils' academic achievement. When Scheffe test was applied the direction of significance influence emerged from ambivalent and secure also disorganized and secure.

In answering the research question, pupils with secure attachment pattern had the highest score when compared to other attachment pattern. This is due to the fact that secure attachment facilitate background communication between teachers and pupils, such pupils are resilient and are motivated to achieve their goals.

On the other hand insecure attachment patterns such as ambivalent, avoidant and disorganized are associated with low motivation and behavioural problem such as aggression and hostility. The result of the present study is in agreement with EkehOmira(2012) that

pupil-teacher attachment pattern influence academic achievement.

The result further revealed that, there is no significant influence of pupil-teacher attachment patterns on pupils' academic achievement due to gender. Other factors such as parenting style and socio-economic background may account for any of such differences however, investigation is still ongoing and inconclusive.

Wentzel (2002) explained that its more challenging to form attachment relationship with males than females, other researchers like Laurel (2001) hold a view that is contrary to that of Wentzel.

Finally, the result showed that there is no interaction effect of pupil-teacher attachment pattern and gender on pupils' academic achievement. The calculated f-ratio of 1.94 for the interaction effect of pupil-teacher pattern and gender were significant at 0.12 level which is higher than the 0.05 level of probability. Thus there is no significant interaction effect of pupil-teacher attachment patterns and gender on pupils' academic achievement.

Conclusion

The following conclusions are drawn. There is a significant influence of pupil teacher attachment patterns on pupils' academic achievement.

There is no significant influence of pupil teacher attachment pattern based on gender. The study further indicated that, there is no interactive effect of pupil teacher attachment patterns and gender on pupils' academic achievement.

Recommendations

The following recommendations were made based on the findings of the study:

- Teachers should strive to establish secure attachment relationship with their pupils in order to facilitate academic achievement.

- Teachers should establish secure attachment pattern with all pupils irrespective of gender.

Teachers should portray characteristics that will promote secure attachment relationship.

Seminar and workshops should be organized for teachers to update their knowledge about professional teaching relationship.

Pupils should be counseled about the benefits of maintaining a secure attachment relationship with their teachers.

Teachers should avoid coercive discipline such as threats and force rather they should ensure that there is positive emotional climate in the classroom.

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