THE ROLE OF PEER GROUP, FAMILY AND QUALITY OF TEACHERS IN DEVELOPING THE INTEREST OF STUDENT IN LEARNING OF MATHEMATICS IN SELECTED SECONDARY SCHOOLS IN MAKURDI METROPOLIS, BENUE STATE

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ABSTRACT

This study examined the role of Peer Group, Family and Quality of Teachers in Developing the Interest of Students in Learning of Mathematics in selected Secondary Schools in Makurdi Metropolis, Benue State, Nigeria. The study was anchored on Resource Framework Theory. The researcher used both primary and secondary sources from a population of 960 and a sample of 260 respondents obtained by the use of a structured questionnaire. The data collected were analyzed using the Ordinary Least Square regression analysis (OLS) while the hypotheses of the study were tested using probability value of the estimates. The result of the regression analysis indicates that a Peer Group (PEG) has a negative effect on Learning Mathematics in selected secondary schools in Makurdi Metropolis, Benue State, Nigeria (LMS) and the relationship is not statistically significant (p>0.05). Family influence (FAM) was negatively related to Learning Mathematics in selected secondary schools in Makurdi Metropolis, Benue State, Nigeria (LMS). Teachers' influence (TCH) has a positive effect on Learning Mathematics in selected secondary schools in Makurdi Metropolis, Benue State, Nigeria (LMS) and the relationship is statistically significant (p>0.05) and in line with a priori expectation. It was concluded that the role of teacher in the teaching and learning of mathematics is very crucial as the love or the phobia for mathematics is engraved in the heart and minds of the young ones at a very early stage by the way and manner the subject is being presented to them. It was recommended among others that, the management of the selected schools and secondary schools in the study area and
Nigeria at large should ensure that qualified teachers should be used in the teaching and learning of Mathematics in secondary school as this has been found to positively influence the learning of mathematics.

**Keyword:** Peers, Family, Teacher, Learning, Mathematics, Benue, Nigeria

1.0 INTRODUCTION

Mathematics is a pillar of almost all the streams in academic sectors. Given the important role mathematics plays in tertiary education and most careers, it is not only beneficial but also essential to establish some of the factors that facilitate achievement in mathematics in schools. According to Hughes, Cavell and Jackson (1999), the most important conclusions from qualitative research on factors related to achievement in schools are that (a) teachers are critical resources; (b) the composition of the student body matters; (c) schools make a difference, and (d) physical facilities, class size, curriculum, instructional strategies and other resources influence student learning indirectly through their effect on the behaviour of teachers and students. This body of research has left out peer group and family influence which is very critical to having successes in the learning of Mathematics.

Children’s academic achievement is related to a complex set of factors such as learning environment, family cultivation and personal learning habits, peer group, quality of teachers among others. A peer group affects student achievement in several ways: members of a group interact in learning, help each
other in their studies, share important information, impose externalities on others by behaving well or badly (for example, a noisy student disrupts the study environment) or by allowing teachers to go deeper in subjects, contribute to the formation of values and aspirations (Bracken and McCallum, 1998).

Peer group has a very significant effect on students study outcomes and the way they behave and go about their activities. Classmates with high abilities help create a more effective learning process: instructors are not interrupted by students asking silly questions and are able to use more challenging material, in addition they are encouraged in their teaching activity by interested and clever students etc (Lazear, 2001). We consider this kind of effect through a measure of a peer group based on students attending courses together. Apart from peer effects related to the classroom environment, students belonging to the same class tend to study and revise the subject together, so generating important externalities. Clearly friendly relationships do not involve all members of a class: some students might attend a course together, but their interaction might still be limited. In fact, students who continually do exams in the same session as one another are often students who study together, sharing course material and information (Hatch, 1998).

Peer pressure in mathematics affects all learners, successful ones as well as those who are less successful. The effect of negative peer pressure has been recorded in numerous articles (Reynolds & Walberg, 1992). In this regard
Stuart (2000) argues that peer and family attitudes towards mathematics may either positively or negatively influence learners’ confidence in the subject. Accordingly, Reynolds and Walberg (1992) identified peer attitudes as one of the most influential factors in learners’ mathematical achievements.

On the effect of teachers' role in the learning of mathematics, multiple factors contribute to the quality of student–teacher and parent–student relationships. Not surprising, students who exhibit under-controlled or aggressive behaviors establish relationships with teachers characterized by lower levels of support and acceptance and higher levels of conflict (Birch & Ladd, 1996; Silver, Measelle, Armstrong and Essex, 2005). Compared with girls, boys' relationships with teachers are characterized by less closeness and more conflict (Saft & Pianta, 2001; Silver et al., 2005), perhaps because boys are less conforming and self-regulated than girls.

It is important to note that parents' perceptions of their own school involvement and educational beliefs and values show low correspondence with teachers' perceptions of their involvement and beliefs (Epstein, 1984, 1996). According to Ogbu (1993), parents' beliefs about appropriate parenting practices and ways to interact with the school vary according to ethnic identity and social class. Unfortunately, data on the frequency of teacher–parent misunderstandings for matched and mismatched ethnicity dyads are not available. One possible negative consequence of a mismatch between the culture of the school and the culture of the family is a weaker alliance between home and school and lower parent
involvement in school, both of which may negatively impact the child’s school adjustment.

It is on this basis that this study examines the role effect of Peer group, Family and Quality of Teachers in developing of the Interest of Students in Learning Mathematics in selected secondary schools in Makurdi Metropolis, Benue State, Nigeria. The specific objectives of this study are to;

i. Examine the effect of peer group in Learning Mathematics in selected secondary schools in Makurdi Metropolis, Benue State,

ii. Determine the effect of family in Learning Mathematics in selected secondary schools in Makurdi Metropolis and

iii. Ascertain the effect of teachers in the Learning Mathematics in selected secondary schools in Makurdi Metropolis.

2.0 LITERATURE REVIEW

Conceptual Framework

Peer group
Understanding the nature and the magnitude of peer group effects in education is crucial for the “productivity” of educational processes and the organizational design of school systems. For example, in order to improve student outcomes, it is important to know which inputs influence their performance most and the relative importance of peer effects compared to other inputs, such as teacher quality or school resources. Peer effects are also important in school design. If peer effects are at work, educational outcomes are affected by how students are arranged across classes and the desirability of comprehensive schools (which mix students of different abilities together) or stratified schools (which tend to aggregate students according to their abilities) depends on the
magnitude and non-linearity of peer effects. More importantly, the nature of peer effects also has fundamental implications in a family’s choice with regards whether parents consider that their offspring would benefit from schools which sort students according to their abilities.

Starting from the classical study of Coleman et al. (1966), a host of works have analysed the effects of peer group on children’s achievement and educational outcomes (Betts and Morell, 1999; Hoxby, 2000; Angrist and Lang, 2004; Hanushek et al., 2003) and on college students’ grades and choices of fields of study (Sacerdote, 2001; Zimmerman, 2003; De Giorgi, Pellizzari and Redaelli, 2006; Foster, 2006), but several problems and controversies are still unresolved. Some of these studies show that peer effects are statistically and economically significant in a variety of educational contexts and that students tend to perform better if the quality of their peer group is higher (Ding and Lehrer, 2006; Zimmerman 2003; Vandenberghhe, 2002; Hoxby, 2000; Sacerdote, 2001; Zimmer and Toma, 2000). Moreover, a number of these studies show that peer effects are often non-linear, implying that students of middle abilities are particularly affected by the negative influence of weak students (Sacerdote, 2001; Zimmerman, 2003). However, the significance and size of peer effects often changes in relation to the sample used. Other studies, in fact, find no significant (or minor) peer effects (Angrist and Lang, 2004; Arcidiacono and Nicholson, 2005; Foster, 2006).

**The Family**
Researchers have been also drawing their attentions on family-level explanatory factors for children’s mathematics learning results from year to year. Some research findings emphasize the importance of home learning environment and preschool effectiveness for improving children’s mathematics scores (e.g., Melhuish et al., 2008). Others (Sheldon, 2005) revealed that a higher level of proficiency on math tests is associated with a higher level of support from family members toward their children’s mathematics learning.

Realizing the importance of engaging in activities with children, Sheldon (2005) recommended schools to help parents build relationship with their children, and develop school-family programs to help children learning mathematics. Learning models which include reading books to children, helping children to do arts, involving children in household chores, playing games, taking about nature, building something, playing a sport or exercise with children as are various methods by which parental engagement in activities with their children can be effected.

A review by Henderson and Berla (2004) of sixty-six studies on the subject of parental involvement concluded that the most accurate predictor of students’ achievement in school is not income or social status, but the extent to which families are able to create a home environment that supports learning; communicate high and reasonable expectations for their children’s achievement; and become involved in their children’s schools.
Providing greater motivation, responsibility, sense of purpose, and confidence, and all these factors could contribute to increase student achievement with homework completion. Students whose parents are involved in their education are more likely to perform better in mathematics and achieve more than other students. Hatch (1998) agrees with this and claims that parental involvement contributes significantly to achievement of both primary and secondary school students in mathematics. He also claims that the higher the expectations parents have for their children’s mathematics achievement the more the children achieve. He further reiterated that research has shown that the more intensively parents are involved in the children’s learning, the higher the achievement effects and that this position holds true for all types of parental involvement in children’s learning and for all types and ages of students. Jeynes (2005) argued that the individual studies on parental involvement have a narrow focus that they had addressed.

Theoretical Framework

Resource Framework Theory

This study is based on the Resource Framework Theory by Brooks-Gunn (1995). In this theory, Brooks-Gunn (1995) describes a “resource framework” for studying child and adolescent development. This framework formalizes an emerging tradition of an integrated approach to analyzing the effects of socioeconomic status on child development and education. The resource framework can be viewed as unifying various overlapping theoretical arguments that have emerged to explain the relationship between socioeconomic status and educational outcomes:
1) “material resource” arguments that indicate that poor children suffer because their parents, communities and schools lack the financial resources that can aid learning and achievement,

2) “human capital” arguments that suggest that poor children suffer because of the poorer endowments and investments they receive from their parents, or, by extension, the poorer human resources in the schools that they attend;

3) “social capital/network” arguments which suggest that impoverished parents and children lack supportive social relationships and networks within and outside of the family necessary for aspiring to and achieving success (Coleman and Early, 1988);

4) “cultural capital” arguments which suggest that children of historically disadvantaged groups suffer because they lack the cultural environment at home that would allow them to connect in the classroom (Brooks-Gunn, 1995).

The Resource Framework theory is applicable to this study because it explains how home environment factors and parental socioeconomic status and other factors influence academic performance of learners. These factors include, peer group, family support and teachers. All these factors are related to the material resource, human capital, social capital, and cultural capital arguments of the resource framework theory in relation to academic performance. For example, parents who are economically stable may provide extra learning materials to their children and this will enhance their academic performance. However, the parents who do not provide their children with the appropriate learning materials and study
environment, negatively affect the performance of their children.

**Empirical Review**

Earlier analyses of peer effects were based on simple econometric models regressing students outcomes on their own individual characteristics (measures of ability, family background and so on) and on their peers’ outcomes or characteristics. As shown by Manski (1993), this kind of regression is plagued by two main econometric problems, which raise doubts about the causal interpretation of the coefficient measuring peer group effects. The first problem, known as “self-selection” bias, depends on the fact that groups of peers are often not exogenously determined, but individuals typically choose the other people they will associate with. Therefore, the characteristics of each student contribute to determining the choice of his/her peers and, if some of these characteristics are not observable, an endogeneity problem arises. The second econometric problem, known as the “reflection” problem, emerges because the outcomes of students in a peer group evolve in an interdependent manner: the achievements of each member affects the achievements of other members but, at the same time, is, itself, affected by the achievements of those self-same peers. Therefore, an estimation bias emerges, due to simultaneity and inverse causality.

Ryan (2005) reported that academic performance is positively related to having parents who enforce rules at home. The obviousness of the research findings reported in this study is that family involvement improves facets of children’s education such as daily attendance, pupil achievement, behaviour, and motivation.
According to Dermie et al. (2007), lack of parental support among the Somali students in the United Kingdom contributed to their poor performance. Many of the Somali parents were unable to offer help to their children because of lack of prior education or ability to use English. The above research was supported by studies in Kenya by Oloo (2003), which showed that a major problem affecting academic achievement was a home environment of the day students that was not conducive to reading.

Meyer and Koehler (1990) state that one of the most important factors in developing learners’ mathematics ability is the attitude of their teacher of mathematics. According to Meyer and Koehler (1990), knowledge of the learners’ thinking is important while teachers’ knowledge of mathematics content and pedagogy is also critical to the culture of the learning environment. According to Lubinski (1994) knowledge of the content and pedagogy in conjunction with learners’ thinking, allows a teacher to design blueprints for worthwhile mathematics tasks.

According to Hammer (2003) the home environment is as important as what goes on in the school. Important factors include parental involvement in their children's education, how much parents read to young children, how much TV children are allowed to watch and how often pupils change schools. Achievement gap is not only about what goes on once pupils get into the classroom. It's also about what happens to them before and after school. Parents and teachers have a crucial role to play to make sure that every child becomes a high achiever. Parental influence has been identified as an important
factor affecting pupil achievement. Results indicate that parent education and encouragement are strongly related to improved pupil achievement (Odhiambo, 2005).

Phillips (1998) also found that parental education and social economic status have an impact on pupil achievement. Pupils with parents who were both college-educated tended to achieve at the highest levels. Income and family size were modestly related to achievement. Peng and Wright’s (1994) analysis of academic achievement, home environment (including family income) and educational activities, concluded that home environment and educational activities explained the greatest amount of variance. In conclusion denying the role of the impact of a pupil’s home circumstances will not help to endow teachers and schools with the capacity to reduce achievement gaps (Hammer, 2003).

3.0 RESEARCH METHODOLOGY
This section presents the methodology followed in analyzing the data collected from the field. This study used an survey research design. The population of the study are four secondary schools in Makurdi Metropolis purposively chosen two from both private and public secondary schools. They are made up of junior and senior secondary school students of Padopas Harmony Secondary School, Government Secondary School North Bank Makurdi, Mount Carmel Secondary School Makurdi and Government Girls Secondary Schools Makurdi. The sample of two hundred and sixty (260) students was drawn from all the schools which means sixty five (65) students were drawn as sample from each of the school.
The data for the study was collected using questionnaire, coded and analyzed using computer-based Statistical Package for Social Sciences (SPSS version 23.0 for Microsoft Windows). The validity and the reliability of the instrument was established using the factor analysis. It was established that the instrument is valid and reliable as the validity score that considered Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity is above the threshold and the Cronbach Alpha Coefficient for reliability is above 0.7.

**Table 1: Kaiser-Meyer-Olkin and Bartlett’s test**

<table>
<thead>
<tr>
<th>KMO and Bartlett's Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</td>
</tr>
<tr>
<td>Approx. Chi-Square</td>
</tr>
<tr>
<td>df</td>
</tr>
<tr>
<td>Sig.</td>
</tr>
</tbody>
</table>

**Source:** SPSS Result, 2019

A pilot test was conducted. The input variable factors used for this study were subjected to exploratory factor analysis to investigate whether the constructs as described in the literature fits the factors derived from the factor analysis. From Table 1, factor analysis indicates that the KMO (Kaiser-Meyer-Olkin) measure for the study’s three independent variable items is 0.984 with Barlett's Test of Sphericity (BTS) value to be 6 at a level of significance p=0.037. Our KMO result in this analysis surpasses the threshold value of 0.50 as recommended by Hair, Anderson, Tatham, and Black (1995). Therefore, we are confident that our sample and data are adequate for this study.
Table 2: Total Variance Explained

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total % of Variance</td>
<td>Cumulative %</td>
<td>Total % of Variance</td>
</tr>
<tr>
<td>1</td>
<td>1.571</td>
<td>39.275</td>
<td>1.571</td>
</tr>
<tr>
<td>2</td>
<td>1.018</td>
<td>25.45</td>
<td>25.45</td>
</tr>
<tr>
<td>3</td>
<td>0.974</td>
<td>24.35</td>
<td>89.078</td>
</tr>
<tr>
<td>4</td>
<td>0.431</td>
<td>10.92</td>
<td>0</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

**Source:** SPSS Result, 2019

The Total Variance Explained table shows how the variance is divided among the 4 possible factors. Two factors have Eigenvalues (a measure of explained variance) greater than 1.0, which is a common criterion for a factor to be useful. When the Eigenvalue is less than 1.0 the factor explains less information than a single item would have explained. Table 2 shows that the Eigenvalues are 1.571 & 1.018 are all greater than 1. Component one gave a variance of 37.763 and Component 2 gave the variance of 26.965. The cumulative of the rotated sum of squared loadings section indicates that two components i.e component 1 and 2 accounts for 64.728 % of the variance of the whole variables of the study. This shows that the
variables have strong construct validity.

**Table 3: Reliability Statistics**

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>Cronbach's Alpha Based on Standardized Items</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.863</td>
<td>.912</td>
<td>4</td>
</tr>
</tbody>
</table>

**Source:** SPSS Result, 2019

As shown by the individual Cronbach Alpha Coefficient the entire construct above falls within an acceptable range for a reliable research instrument of 0.70. The Cronbach Alpha for the individual variables is 0.863 and is found to be above the limit of acceptable degree of reliability for research instrument.

**Table 4: Item-Total Statistics**

<table>
<thead>
<tr>
<th></th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Squared Multiple Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>LMS</td>
<td>90.8500</td>
<td>315.503</td>
<td>.791</td>
<td>.067</td>
<td>.744</td>
</tr>
<tr>
<td>PEG</td>
<td>90.7500</td>
<td>275.039</td>
<td>.450</td>
<td>.319</td>
<td>.797</td>
</tr>
<tr>
<td>FAM</td>
<td>91.8000</td>
<td>351.853</td>
<td>.445</td>
<td>.018</td>
<td>.637</td>
</tr>
<tr>
<td>TCH</td>
<td>89.9000</td>
<td>240.516</td>
<td>.340</td>
<td>.274</td>
<td>.436</td>
</tr>
</tbody>
</table>

**Source:** SPSS Result, 2019

As shown in Table 4, an item-total correlation test is performed to check if any item in the set of tests is inconsistent with the averaged behaviour of the others, and thus can be discarded. A reliability analysis was carried out on the variables of the study values scale comprising three (3) items. Cronbach's Alpha showed the questionnaire to reach acceptable reliability, $\alpha = 0.863$. All items
appeared to be worthy of retention, resulting in a decrease in the alpha if deleted. There is no exception to this in all the variables of the study as none of the items if deleted will improve the overall Cronbach alpha statistics. As such, none of the variables was removed. A correlation value less than 0.2 or 0.3 indicates that the corresponding item does not correlate very well with the scale overall and, thus, it may be dropped.

**Models Specification**
Guided by the functional relationship between the variables of the study, the model is expressed in implicit and explicit function as shown below:

\[
LMS = f(PEG, FAM, TCH)
\]

Where,

- **LMS** = Learning of Mathematics
- **PEG** = Peer Group Influence
- **FAM** = Family Influence
- **TCH** = Teacher's Influence

In explicit form, the functional relationship between the variables of the study can be shown below:

\[
LMS = b_0 + b_1 PEG + b_2 FAM + b_3 TCH + U_t
\]  
(7)

Where,

- **b_0** = Regression constant
- **b_1 - b_3** = coefficients of independent variables.
- **U_t** is the error term

**A priori expectations**

- (\(X_1\)) = Peer Group Influence; **a priori** expectation is ±
- (\(X_2\)) = Family Influence: **a priori** expectation is ±
- (\(X_3\)) = Teacher's Influence: **a priori** expectation is ±

The Ordinary Least Square regression (OLS) analysis was used to assess the nature and degree of relationship between the dependent variable and a set of independent or predictor variables. However, the probability value of the estimates will be used to test
the 3 hypotheses of this study.

**Decision rule:** The following decision rules were adopted for accepting or rejecting hypotheses: *If the probability value of \( b_i \) \( [p (b_i) > \text{critical value}] \) we accept the null hypothesis, that is, we accept that the estimate \( b_i \) is not statistically significant at the 5% level of significance. *If the probability value of \( b_i \) \( [p (b_i) < \text{critical value}] \) we reject the null hypothesis, in other words,*

that is, we accept that the estimate \( b_1 \) is statistically significant at the 5% level of significance.

### 4.0 RESULTS AND DISCUSSION

This section presents the result of the relationship between the dependent and the independent variables of the study by the use of the Ordinary Least Square Regression (OLS). This is shown below.

![Histogram](image)

**Figure 1:** Regression Standardized Residual
Figure 1 above shows a histogram of the residuals with a normal curve superimposed. The residuals look close to normal, implying a normal distribution of data. Here is a plot of the residuals versus predicted dependent variable of Learning of Mathematics (LMS). The pattern shown above indicates no problems with the assumption that the residuals are normally distributed at each level of the dependent variable and constant in variance across levels of Y.

Table 5: Statistical Significance of the model

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>175.664</td>
<td>3</td>
<td>58.555</td>
<td>.381</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>2458.086</td>
<td>16</td>
<td>153.630</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2633.750</td>
<td>19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: LMS  
b. Predictors: (Constant), TCH, FAM, PEG

Source: SPSS 20.0 Result Output, 2019

The result of the statistical significance of the model is presented in Table 5. The F-ratio in the ANOVA table above tests whether the overall regression model is a good fit for the data. The table shows that the independent variables statistically significantly predicts the dependent variable F (3, 16) = 0.381, p =0.007^b (i.e., the regression model is a good fit of the data).

Table 6: Model summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
</table>
Table 6 shows the model summary. The coefficient of determination $R^2$ for the study is 0.867 or 86.7%. This indicates that 86.7% of the variations in the model can be explained by the explanatory variables of the model while 13.3% of the variation can be attributed to unexplained variation captured by the stochastic term. The Adjusted $R^2$ and $R^2$ show a negligible penalty (72.1%) for the explanatory variables introduced by the researcher. The Durbin Watson statistics is 2.677 shows that there is a minimal degree of negative autocorrelation in the model of the study; hence the estimates of the model can be used for prediction.

**Table 6: Regression coefficients**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>34.733</td>
<td>15.871</td>
<td>2.188</td>
<td>.044</td>
<td></td>
</tr>
<tr>
<td>PEG</td>
<td>-.338</td>
<td>.318</td>
<td>-.301</td>
<td>-1.064</td>
<td>.303</td>
</tr>
<tr>
<td>FAM</td>
<td>-.017</td>
<td>.365</td>
<td>-.011</td>
<td>-.046</td>
<td>.964</td>
</tr>
<tr>
<td>TCH</td>
<td>.401</td>
<td>.392</td>
<td>.344</td>
<td>.512</td>
<td>.016</td>
</tr>
</tbody>
</table>

a. Dependent Variable: LMS

**Source:** SPSS 20.0 Result Output, 2019
As shown by the result of the Ordinary Least Square regression, Peer Group (PEG) has a negative effect on Learning Mathematics in selected secondary schools in Makurdi Metropolis, Benue State, Nigeria (LMS) and the relationship is not statistically significant ($p>0.05$). This means that a unit increase in Peer Group (PEG) will result to a corresponding decrease in Learning Mathematics in selected secondary schools in Makurdi Metropolis, Benue State, Nigeria (LMS) by margin of 30.1 %. Using the probability value of the estimate, $p(b_1) >$ critical value at 0.05 confidence level. Thus, we accept the null hypothesis. That is, we accept that the estimate $b_1$ is not statistically significant at the 5% level of significance. This implies that Peer Group has no significant effect on Learning Mathematics in selected secondary schools in Makurdi Metropolis, Benue State, Nigeria.

Family influence (FAM) was negatively related to Learning Mathematics in selected secondary schools in Makurdi Metropolis, Benue State, Nigeria (LMS) and the relationship is not statistically significant ($p>0.05$). This means that a unit increase in family influence (FAM) will result to a corresponding decrease in Learning Mathematics in selected secondary schools in Makurdi Metropolis, Benue State, Nigeria (LMS) by margin of 1.10 %. Using the probability value of the estimate, $p(b_2) >$ critical value at 0.05 confidence level. Thus, we accept the null hypothesis. That is, we accept that the estimate $b_2$ is not statistically significant at the 5% level of significance. This implies that Family influence has no significant effect on Learning Mathematics in selected secondary schools in Makurdi Metropolis, Benue State, Nigeria.
Mathematics in selected secondary schools in Makurdi Metropolis, Benue State, Nigeria.

Finally, as shown by the result of the Ordinary Least Square regression, Teachers' influence (TCH) has a positive effect on Learning Mathematics in selected secondary schools in Makurdi Metropolis, Benue State, Nigeria (LMS) and the relationship is statistically significant \((p>0.05)\) and in line with \textit{a priori} expectation.

This means that a unit increase in Teachers' Influence (TCH) will result to a corresponding increase in Learning Mathematics in selected secondary schools in Makurdi Metropolis, Benue State, Nigeria (LMS) by margin of 30.1%. Using the probability value of the estimate, \(p(b_3) < \) critical value at 0.05 confidence level. Thus, we reject the null hypothesis. That is, we accept that the estimate \(b_3\) is statistically significant at the 5% level of significance. This implies that Teacher's influence has a significant effect on Learning Mathematics in selected secondary schools in Makurdi Metropolis, Benue State, Nigeria.

5.0 CONCLUSION AND RECOMMENDATIONS

Conclusions
This study examined the role of peer group, family and quality of teachers in developing the interest of student in learning mathematics. From the research findings, it was established that teachers influence is a significant factors that influence the learning of mathematics by students among secondary school students in Makurdi Metropolis of Benue State Nigeria. Based on this, it was concluded that the role of teacher in the teaching and learning of mathematics is very crucial as the love or the phobia for
mathematics is engraved in the heart and minds of the young ones at a very early stage by the way and manner the subject is being presented to them. This shows that as a mathematics teacher, one's role is ensuring that students will have the knowledge and skills that will help them not only succeed in the classroom, but also be empowered by mathematics to become productive citizens of our democratic society.

**Recommendations**

1. Based on the findings of the study, the researcher recommends that Mathematics instruction by teachers should provide students opportunities to engage in mathematical inquiry and meaning making through discourse. While there have been successes to this end, traditional models of instruction still dominate mathematics education especially at the high school level. This can be attributed, in part to the teachers' role and their ability to successfully organize and facilitate collaborative classroom practices.

2. It is therefore recommended that since teachers' influence had the highest effect on the learning of mathematics in the study area, the management of the selected schools and secondary schools in general in the study area and Nigeria at large should ensure that qualified teachers should be used in the teaching and learning of Mathematics in secondary school. Parents should equally be encouraged to play significant role in supporting their children with all the needed resources and attention to enable them to effectively learn mathematics both at the school and at home.

3. More study is needed in the area of how peer group influence
themselves and how peer groups can be a potent vehicle which can be utilized in the ensuring effective learning of mathematics in the study area.

REFERENCES


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