

## Influence of Peer Pressure on Students' Academic Performance in Basic Science in Junior Secondary Schools in Akamkpa Local Government Area, Cross River State

<sup>1</sup>Effiong, Oji Ekpo & <sup>2</sup>Ogar Margaret Ehi

<sup>1&2</sup>Department of Integrated Science Education  
University of Education and Entrepreneurship, Akamkpa

Article DOI: 10.48028/ijprds/ijarssest.v10.i1.04

### Abstract

The study assessed the level of peer pressure among junior secondary school students of Basic science in Akamkpa Local Government Area of Cross River State. It also determined the difference between male and female junior secondary school students of Basic science peer pressure influence on their academic performance and examined the difference across age groups peer pressure influence on students' academic performance of junior secondary school students in Basic science in the study area. The study adopted a descriptive survey research design. The target population is the junior secondary school students of Basic Science in Akamkpa Local Government Area of Cross River State, Nigeria. Eight junior secondary schools were selected using a simple random sampling technique. From each of the schools, thirty students were selected using the simple random sampling technique, summing up to 240 students that made up the sample for the study. Two self-designed research instruments were used for the study: The Peer Pressure Questionnaire (PPQ) and the Basic Science Test (BST). The data collected were analyzed using frequency, simple percentage, graphs, and multivariate analysis of variance (MANOVA). The results of the study showed that the students demonstrated moderate peer pressure influence in junior secondary school 148 (61.7%). The result of the study further indicated that there was no statistically significant difference between male and female on the combined dependent variables ( $F(2,237) = 0.97, P = 0.05$ ). The results finally revealed that there was no statistically significant difference between different age groups on the combined dependent variables in the study area ( $F(2,237) = 0.65, P > 0.05$ ). It was therefore concluded that the level of peer pressure among junior secondary schools is moderate, and that peer pressure influences academic performance, though moderating variables have no significant influence on students' performance in basic science in the study area.

**Keywords:** *Influence of Peer Pressure, Students' Academic Performance, Basic Science, Junior Secondary Schools*

*Corresponding Author: Effiong, Oji Ekpo*

### **Background to the Study**

Educational activities are geared toward ensuring that students achieve mastery of educational objectives. It is observed in schools that the extent to which these objectives have been achieved is determined by their level of peer pressure and time management, as students' success is reflected in their academic performance. Peers play a large role in the social and emotional development of an adolescent (Allen et al., 2005). Their influence begins at an early tender age and increase through the teenage years, which is natural, healthy and therefore important for adolescent to have and rely on friends as they grow and mature. Thus, a peer could be anyone you look up to in behaviour or someone who you would think is equal to your age or ability. The term "pressure" implies the process that influence people to do something that they might not otherwise choose to do. Adolescence in children is a time of transformation in many areas of an individual's life. In the midst of these rapid physical, emotional, and social changes, children begin to question adult standards and the need for parental guidance. It is also a time for individuals to make crucial decisions about their commitment to academics and family. As Adolescents make the transition to their primary school to junior secondary school or perhaps high school, peer network increase, and peer crowd affiliation becomes an important aspect of peer relations. At the junior secondary class, dating relationships emerge and take on increasing importance. By age ten (10) to sixteen (16), majority of adolescent's report having had a romantic relationship. Therefore, adolescence is characterized by changes in terms of physical, thinking and problem-solving as well as emotional and sexual maturity.

In addition, adolescents have always been exposed to peer pressure, but the kinds of peer influence that they encounter have changed tremendously in the recent years. Peers can influence everything from what an adolescent chooses to wear, drink, or eat to whether or not an adolescent engages in drug-related or other delinquent behaviours. This is an important issue to be studied because if society and education-related professionals understand the issue surrounding negative peer influence, they can adequately prepare themselves to help teenagers facing negative aspects of peer pressure (Jones, 2010). Peer pressure is defined as the ability of people from the same social rank or age to influence another of the same age bracket; peer pressure is usually associated with teens although its influence is not confined to teenagers alone. Hartley (2011) defines peer pressure as the influences that peers can have on each other. Weinfield (2010) peer pressure is emotional or mental forces from people belonging to the same social group (such as age, grade or status) to act or behave in a manner similar to themselves.

However, peers can also have a negative influence on one another such as encouraging each other to skip classes, steal, cheat, bully use of drugs or alcohol, or become involve in other risky behaviors within or outside the learning place. Negative peer pressure may influence in various ways like joining group who drink alcohol, smoke cigarette and indian hemp among others. It may also lead to the decision to dating relationships such as having boyfriend or girlfriend. Peer pressure indulges Youth into loitering about in the streets, watching films, going to pools and attending parties during school hours, taping as alternative to stealing which may eventually graduate into a big criminal act. Peer Pressure as it influences academic performance of in school adolescents in junior secondary school.

Academic performance on the other hand refers to how well a student is accomplishing his or her studies school (2012) grades are certainly the most well -known indicator of academic performance. Grades basically are students "scores" for their classes and overall tenure. Grades are most often a tallying or average of assignment, test scores, examination and may often be affected by factors such as attendance an instructor opinion of the student as well. Grading systems very greatly by country and school; common scales include a percentage from 1-100, lettering system A-F, and grade point averages (GPA) from 0-50. According to Ward, Stocker and Murray-Ward (2006) academic performance refers to the outcome of education; the extent to which the student, teacher or school have achieved their educational goals. Academic Performance is the ability to study and remember facts and being able to communicate one's knowledge orally or written in paper. Therefore, academic achievement or performance refers to the extent to which students have achieved mastery of the objectives of the subjects especially Mathematics, English language, Basic science and technology, Religious and National Value Education among junior secondary school students.

The blame for poor academic performance among junior secondary school students could be attributable to a variety of factors such as student's inability to manage their time, peers influence, family factors and the likes. Parents, teachers, curriculum experts and evaluators have expressed considerably concern over the deteriorating students' performance in public examinations such as Basic Education Certificate Examination (BECE) and National Examination Council (NECO). Therefore, students within adolescent age should avoid negative pressure such as loitering along the street during school hours, holding parties at the expense of their study claiming to be celebrating a birthday, skipping school and drug abuse. That will create room for poor academic performance. The adolescent should move with people who study their books in order to achieve good academic performance.

Stakeholders in education are expressing considerable concern about the poor performance of students in external examinations such as the Basic Education Certificate Examination and other national examinations. These groups of individuals tend to place a greater percentage of the blame for the influence of negative peer pressure and poor time management by the students as being responsible for poor academic performance. These factors are suspected for the luring of adolescents into engagement in negative habits such as late coming to school, moving around the streets, and absence from school. The prevalence of these behaviors among students is very high, which appears to make students miss some topics taught in schools and engage in unhealthy sexual behaviours, cult activities, and other behaviours that distract them from their academic pursuits. Various research works only highlighted lateness without considering other factors, such as habits derived from peer pressure that affect students' academic performance. It is on this premise that the study seeks to determine the influence of peer pressure on the academic performance of students in basic science.

### **Research Questions**

1. Does the level of peer influence in junior secondary school affect students' academic performance in Basic Science?
2. Is there any difference between male and female junior secondary school students

regarding Basic Science peer pressure's influence on their academic performance in Akamkpa Local Government Area?

3. Is there any difference across age groups in peer influence on students' academic performance in Basic Science in Akamkpa Local Government Area?

### Research Hypothesis

The following hypotheses were tested at a .05 significance level:

- i. There is no significant relationship in the level of peer pressure influence on junior secondary school students' academic performance in Basic Science in Akamkpa Local Government Area.
- ii. There is no significant difference between male and female junior secondary school students' peer influence on Basic Science academic performance.
- iii. There is no significant difference across age groups in peer influence on junior secondary school students' academic performance in basic science.

### Methodology

The study adopted a descriptive survey research design. The population of the study consists of all the public and comparable junior secondary school (JSS 2) students in Akamkpa Local Government Area of Cross River State. Eight (8) junior secondary schools were selected using a simple random sampling technique. From each of the sampled schools, thirty (30) students were selected using simple random sampling technique making a total of two hundred and forty (240) students for the study. See table below:

| S/N | Name of School                               | Number of Students Sampled |
|-----|----------------------------------------------|----------------------------|
| 1   | Government Day Secondary School Akamkpa      | 30                         |
| 2   | Community Secondary Grammar School Oban      | 30                         |
| 3   | Comprehensive High School Ayaebam            | 30                         |
| 4   | Onun Comprehensive Secondary School Mbarakom | 30                         |
| 5   | Government Secondary School Uyanga           | 30                         |
| 6   | Government Secondary School Iwuru Central    | 30                         |
| 7   | Government Secondary School Akamkpa          | 30                         |
| 8   | Comprehensive Secondary School Aking         | 30                         |
|     | Total                                        | 240                        |

### Instrumentation

Two self-designed research instruments were used for the study. They are: Peer Pressure Questionnaire (PPQ) and Basic Science Test (BST). The questionnaire (PPQ) and basic science test (BST). The questionnaire consists of Sections A and B. Section A comprises statements related to the demographic data of the respondents, while Section B contains statements bordering on the research questions. The instrument was given to an expert in test and measurements and another expert in Basic Science. The reduction of the instrument from its originality to what was used ascertained the face and content validity of the instrument.

The questionnaire was administered to the respondents by the researcher before administering the instrument, the students were adequately instructed on how to fill the questionnaire

independently and uninfluenced by their classmates. The above precaution was taken to avoid wastage of the questionnaire as a result of incorrect or improper filling and to ensure greater objectivity of the responses. The Instruments were all collected after filling by the researcher. Data Collected were analyzed using frequency, simple percentage, graphs, and multivariate analysis of variance (MANOVA).

### **Presentation, Interpretation, Discussion and Findings**

The data generated in the study were presented in the tables below:

**Table 1:** Distribution of students by Gender.

| Gender | Frequency | Percentage (%) |
|--------|-----------|----------------|
| Male   | 110       | 45.8           |
| Female | 130       | 54.2           |
| Total  | 240       | 100.0          |

Table 1 shows that 45.8% of the students were male, while 54.2% were females indicating that majority of the respondents were female students.

**Table 2:** Distribution of students by Age group

| Age group | Frequency | Percentage (%) |
|-----------|-----------|----------------|
| 11-13     | 120       | 50.0           |
| 14-16     | 83        | 34.6           |
| 17-above  | 37        | 15.4           |
| Total     | 240       | 100.0          |

Table 2 shows that 50% of the respondents were between age groups of 11-13 years, 34.6% were between 14-16 years and 15.4% were 17 years and above indicating that majority of the respondents were between 11-13 years age group with frequency of 120 students.

**Research Question One:** Does the level of peer influence in junior secondary schools affect students' academic performance in Basic science?

To answer this question, students' responses to section B of PPQ were scored based on the items in the questionnaire as rated by the researcher or investigator. The individual respective scores were summed up to build their status of peer pressure influence. The mean and standard score of the group were 50.61 and 20.84 respectively. Scores below the group mean score were considered as having a low peer pressure influence. Scores within the mean score and one standard deviation above the mean score (i.e. 50.61-71.45) were considered as moderate peer pressure influence while those with scores of 72 and above were considered as high peer pressure influence. The result is presented in table 3 below.

**Table 3:** Descriptive Statistics of peer pressure influence on junior secondary school students.

| Status   | Frequency | Percentage (%) |
|----------|-----------|----------------|
| Moderate | 148       | 61.7           |
| Low      | 42        | 17.5           |
| High     | 50        | 20.8           |
| Total    | 240       | 100.0          |

Table 3 shows that 61.7% of the students had moderate peer pressure influence. And 17.5% of the students have low peer pressure influence while 20.8% of the students were found to have high peer pressure influence. This indicates that more than 50% of the students who participated in the study demonstrated moderate peer pressure influence.

**Hypothesis One:** There is no significant difference between male and female students' peer pressure influence on their academic performance. To test the hypothesis, the data collected were subjected to descriptive statistics and multivariate analysis of variance (MANOVA).

**Table 4:** Descriptive Statistics of peer pressure influence on students' academic performance based on gender.

| Gender                  |        | Mean  | Std. Deviation | N   |
|-------------------------|--------|-------|----------------|-----|
| Peer Pressure Influence | Male   | 48.61 | 21.718         | 110 |
|                         | Female | 52.30 | 19.998         | 130 |
|                         | Total  | 50.61 | 20.842         | 240 |
| Academic Performance    | Male   | 24.65 | 7.882          | 110 |
|                         | Female | 24.93 | 8.048          | 130 |
|                         | Total  | 24.80 | 7.957          | 240 |

Results in Table 4 shows the descriptive statistics of peer pressure influence on students' academic performance based on gender. It can be deduced from the above table that peer pressure influence of male students has a mean score of ( $x=48.61$ ) while peer pressure influence of female students have a mean score of ( $x=52.30$ ). In the same vein, the academic performance of male students has a mean score of ( $x=24.65$ ), whereas the academic performance of female students has a mean score of ( $x=24.93$ ). This implies that female students' peer pressure influence and academic performance are slightly different, considering their close mean scores.

**Table 5:** Multivariate analysis of variance (MANOVA) of Peer Pressure Influence on students' academic performance based on gender.

| Effect    |                    | Value  | F         | Hypothesis df | Error df | Sig. | Partial Eta Squared |
|-----------|--------------------|--------|-----------|---------------|----------|------|---------------------|
| Intercept | Pillai's Trace     | .935   | 1699.042b | 2.000         | 237.000  | .000 | .935                |
|           | Wilks' Lambda      | .065   | 1699.042b | 2.000         | 237.000  | .000 | .935                |
|           | Hotelling's Trace  | 14.338 | 1699.042b | 2.000         | 237.000  | .000 | .935                |
|           | Roy's Largest Root | 14.338 | 1699.042b | 2.000         | 237.000  | .000 | .935                |
| Gender    | Pillai's Trace     | .008   | .946b     | 2.000         | 237.000  | .390 | .008                |
|           | Wilks' Lambda      | .992   | .946b     | 2.000         | 237.000  | .390 | .008                |
|           | Hotelling's Trace  | .008   | .946b     | 2.000         | 237.000  | .390 | .008                |
|           | Roy's Largest Root | .008   | .946b     | 2.000         | 237.000  | .390 | .008                |

a. Design: Intercept + Gender. b. Exact statistics

Results in Table 5 above reveal the multivariate analysis of variance of peer pressure influence on students' academic performance based on gender. Two dependent variables were used: peer pressure and academic performance. The independent variable was gender. Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance, covariance matrices, and multicollinearity, with no violations noted. Inferentially, it can be observed from the table that there was no statistically significant difference between male and female on the combined dependent variables,  $F(2,237)=0.97$ ,  $p=.390$ ; Wilks' Lambda=0.99; partial eta squared=.088.

**Hypothesis Two:** There is no significant difference across different age groups in peer pressure influence on students' academic performance.

To test the hypothesis, data were subjected to descriptive statistics and multivariate analysis of variance (MANOVA)

**Table 6:** Descriptive Statistics of peer pressure influence on students' academic performance based on age groups.

| Peer Pressure        | Age      | Mean  | Std. Deviation | N   |
|----------------------|----------|-------|----------------|-----|
|                      | 11-13    | 49.08 | 20.696         | 120 |
|                      | 14-16    | 51.39 | 20.896         | 83  |
|                      | 17-above | 53.81 | 21.299         | 37  |
|                      | Total    | 50.62 | 20.842         | 240 |
| Academic Performance | 11-13    | 24.58 | 8.453          | 120 |
|                      | 14-16    | 25.45 | 7.911          | 83  |
|                      | 17-above | 24.05 | 6.316          | 37  |
|                      | Total    | 24.80 | 7.957          | 240 |

Results in Table 6 above shows the descriptive statistics of peer pressure influence on students' academic performance based on age groups. It can be deduced from the table that peer pressure influence of students whose age group is 11-13 have a mean score of ( $\bar{x}=49.08$ ) while peer

pressure influence of students whose age group is 14-16 have a mean score of ( $x=51.39$ ) and peer pressure influence of students whose age group is 17-above have a mean score of ( $x=53.81$ ). In the same vein, the academic performance of students whose age group is 11–13 has a mean score of ( $x=24.58$ ), while the academic performance of students whose age group is 14–16 has a mean score of ( $x=25.45$ ), and the academic performance of students whose age group is 17 and above has a mean score of ( $x=24.05$ ). This implies that peer pressure influence and academic performance of students based on age groups are slightly different considering their close mean scores.

**Table 7:** Multivariate analysis of variance (MANOVA) of Peer Pressure Influence on students' academic performance based on age group.

| Effect    |                    | Value  | F         | Hypothesis df | Error df | Sig. | Partial Eta Squared |
|-----------|--------------------|--------|-----------|---------------|----------|------|---------------------|
| Intercept | Pillai's Trace     | .920   | 1360.786b | 2.000         | 236.000  | .000 | .920                |
|           | Wilks' Lambda      | .080   | 1360.786b | 2.000         | 236.000  | .000 | .920                |
|           | Hotelling's Trace  | 11.532 | 1360.786b | 2.000         | 236.000  | .000 | .920                |
|           | Roy's Largest Root | 11.532 | 1360.786b | 2.000         | 236.000  | .000 | .920                |
| Age group | Pillai's Trace     | .011   | .653      | 4.000         | 474.000  | .625 | .005                |
|           | Wilks' Lambda      | .989   | .651b     | 4.000         | 472.000  | .627 | .005                |
|           | Hotelling's Trace  | .011   | .648      | 4.000         | 470.000  | .628 | .005                |
|           | Roy's Largest Root | .007   | .841c     | 2.000         | 237.000  | .433 | .007                |

a. Design: Intercept + Age group b.Exact statistics c. The statistics is an upper bound on F that yields a lower bound on the significance level.

Results in Table 7 above reveal the multivariate analysis of variance of peer pressure influence on students' academic performance based on age group. Two dependent variables were used: peer pressure and academic performance. The independent variable was age group. Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance, covariance matrices, and multicollinearity, with no violations noted. Inferentially, it can be observed from the table that there was no statistically significant difference between different age groups on the combined dependent variables,  $F(2,236)=.65$ ,  $p=.627$ ; Wilks' Lambda=0.99; partial eta squared=.005.

### Discussion of Findings

Findings of the study showed that the study sample demonstrated moderate peer pressure influence on junior secondary school students of Basic Science. The result corroborates the findings of Bobbies & Elhaney (2015), indicating that peer pressure refers to the way people of the same social group act or believe in order to influence one another, often in negative ways. Peer pressure is something everybody has to deal with at some time in their lives. Peer pressure is defined as when people of one's age encourage or urge him to do something or keep off from

doing something else, irrespective of the person's desire to or not to (Ryan, 2020; Uche, 2019). Peer pressure is an emotional or mental force from people belonging to the same social group (such as the same age grade or status) to act or behave in a manner similar to themselves. Peer pressure has a great influence on adolescent behavior and reflects young people's desire to fit in and be accepted by others (Arief and Martins, 2011). Peer pressure is also known as peer influence, and it involves changing one's behavior to meet the perceived expectations of others (Ikwuji, 2015).

The results of the study further indicated that there was no statistically significant difference between male and female junior secondary school students' basic science peer pressure influence on their academic performance. The results upheld the findings of Ikwuji (2015), who conducted a study on the influence of age, gender, and value orientation on adolescent students' moral judgments in conflict situations. The researcher found out that the majority of adolescents base their moral judgments in conflict situations on peer-approved values, meaning that the peer group has an enormous influence on how the adolescents think and act. The researcher also found that there was no gender difference between adolescent males and females in their moral judgments in conflict situations. This shows that in organizing a moral instruction class, the teacher should make it a point of duty to ensure that both sexes mix freely in order to share more experiences in discussing conflicting moral problems.

Hence, parents, teachers, and other significant adults should avoid unhealthy behaviors such as drunkenness, telling lies, skipping school, cultism, smoking, etc., that can be easily imitated by adolescent students. Relating the study to the present study, students should be imitators of good behaviours. The results of the study finally revealed that there was no statistically significant difference between different age groups on the combined dependent variables in the study area. The result also buttresses the account of Ikwuji (2015) and Hartney (2014) that there was no significant difference in age groups of learners and that the socio-economic status of parents of the learners has a significant influence on peer pressure, thereby influencing the learners' academic performance in schools.

## **Conclusion**

The study specifically determined the influence of peer pressure on the academic performance of students in Basic Science. The findings of the study showed that the study sample demonstrated moderate peer pressure influence on junior secondary school students of Basic Science, since peer pressure is something everybody has to deal with at some time in their lives. The research also found that the majority of adolescents base their moral judgments in conflict situations on peer-approved values, meaning that the peer group has an enormous influence on how the adolescents think and act. The researcher also found that there was no gender difference between adolescent male and female in their moral judgements in conflict situations. This shows that in organizing a moral instruction class, the teacher should make it a point of duty to see that both sexes mix freely in order to share more experiences in discussing conflicting moral problems. Based on the findings of the study, it can therefore be concluded that the level of peer pressure among junior secondary school students is moderate, and that peer pressure influences their academic performance, though moderating variables do not

significantly influence the performance of the students in their study area. This means that peer pressure influences students' academic performance in basic science learning.

### **Recommendations**

The following recommendations are put forward based on the findings of the study.

1. Federal, state, and local governments, the Ministry of Education, and policy makers should come up with policies to ensure that peer pressure is checked in secondary schools.
2. Parents and guardians should be watchful of the kind of friends kept by their wards/children.
3. The parent-child relationship should be cordial enough to permit adolescents to discuss their issues with their parents.
4. The school counsellors should also provide usable and adequate information both to the students and their parents about peer pressure in public secondary schools.
5. Conferences, seminars, and workshops should be organized by teachers, students, parents, and guardians to reduce peer pressure in society.

### **References**

- Allen, J. P., Porter, M. R., McFarland, F. C., Marsh, P., & McElhaney, K. B. (2015). The two faces of adolescents' success with peers: Adolescent popularity, social adaptation, and deviance behavior, *Child Development*, 76(3), 747-760
- Arief, G. I. & Martin, A. J. (2011). Peer relationship and adolescents' academic and non-Academic outcomes: same-sex and opposite-sex peer effects and the role of school engagement, *British Journal of Educational Psychology*, 81, 183-206.
- Brown, B. B., & Larson, J. (2009). Peer relationships in adolescents. In Steinberg, R. M.L.(Ed.). *Handbook of adolescent psychology. Contextual influences on adolescent development* (Vol.2.3rd ed., pp.74-103).
- Burnett, S., Sebastian, C., Cohen Kadosh, K., & Blakemore, S. J. (2011). The social brain in adolescence: Evidence from functional magnetic resonance imaging and behavioral studies, *Neuroscience and Biobehavioral Reviews*, 35, 1654-1664.
- Castrogiovanni, D. (2018). *Adolescence: Peer groups*, Retrieved from <http://www.ianr.uni.edu/pubs/family/nf211.html>\_on 25-2-2018
- Hartney, H. (2014). *Make time to manage your time more effectively*, Executive Educator.
- Ikwuji, R. (2015). *A study on the influence of age, gender, and value orientation on adolescent student's moral judgment in conflict situations*, Unpublished M. Ed. Thesis, University of Nigeria. Nsukka.

- Lashbrook, J. T. (2016). Fitting in: Exploring the emotional dimension of adolescent pressure, *Adolescence*, 35(140), 747-757
- Lavy, V. & Shlosser, A. (2007). *Mechanisms and impacts of gender peer effects at school*, NBER Working Paper 13292. National Bureau of Economic Research, Cambridge, MA.
- Olalekan, A. B. (2016). Influence of peer group relationship on the academic performance of Students in secondary schools: A case study of selected secondary schools in Atiba Local Government Area of Oyo State, *Global Journal of Human-Social Science*, 16,4.
- Ryan, A. M (2020). Peer groups as a context for the socialization of adolescents' motivation, engagement, and achievement in school, *Educational Psychologist*, 35, 101-112
- Steinberg, L (2015). *Psychology of adolescents*, New York: McGraw.
- Steinberg, L. (2018). A social neuroscience perspective on adolescent risk-taking, *Developmental Review*, 28,78-106
- Temitope, B. E., and Christy, O. F. (2015). Influence of peer group on academic performance of secondary school students in Ekiti State, *International Journal of Innovative Research and Development*, 4(1), 324-331.
- Uche, V. O. (2019). *The effects of family structure, socio-economic and parents' hood on the academic performance of university students*, Edo: Kamala Raj Publishers.