Influence of parenting style, and parental involvement on student's academic performance in Oriade Local Government Area, Osun State, Nigeria

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ABSTRACT

The study investigated the influence of parenting style, and parental involvement, on secondary school students' academic performance, in Oriade Local Government Area, Osun State, Nigeria. The descriptive survey research design of the ex-post facto type was employed in the study. Respondents were 300 secondary school students, randomly drawn from 10 schools constituted the study sample. Two valid and reliable instruments (Parental Style and Parental Involvement Questionnaire (PSPIQ) and students' score in English Language and mathematics) provided data for the study. The Bivariate and multiple regression statistical methods were used to analyze the data. Results obtained indicated that parenting style had no significant influence on students' academic performance (F=0.478, P>0.05). However, the positive regression coefficient revealed a positive influence of parenting style on students' academic performance. Contrarily, parental involvement was observed to have positive and significant influence on students' academic performance, (F=35.218, P<0.05). The results further demonstrated no significant joint influence of parenting style and parental involvement on students' academic performance (F=2.56, P>0.05). Parental involvement exerted more influence on students' academic performance than parenting style. Based on the results, the study suggested that school authorities should educate parents on the relationship between parenting style and students' academic performance. Also, that parents should be close to their children, in order to abreast themselves with their school needs.

KEYWORDS

Academic performance, parenting style, parental involvement, influence, secondary school students

RÉSUMÉ

La présente recherche a cherché à déterminer l'influence du style parental et de la participation parentale sur la performance scolaire des étudiants du secondaire dans la commune d'Oriade

de l'état d'Osun au Nigeria. Un plan de sondage de recherche descriptif de type a posteriori a été retenu pour le travail. L'enquête a porté sur un échantillon de 300 étudiants choisis au hasard parmi les étudiants de 10 écoles secondaires de la commune. Deux instruments valables et fiables, le Questionnaire sur le style parental et la participation parentale d'un côté et les notes en langue anglaise et en mathématiques des étudiants de l'autre côté, ont fourni les données soumises aux analyses de régression de deux variables et de plusieurs variables. Les résultats obtenus permettent de conclure que le style parental n'a pas exercé une influence significative sur la performance des étudiants (F=0.478, P>0.05). Toutefois, le coefficient de régression positif laisse conclure à une influence positive du style parental sur la performance scolaire des étudiants. En revanche, on a pu observer que la participation parentale a exercé une influence positive et significative sur la performance scolaire des étudiants (F=35.218, P < 0.05). Par ailleurs, les résultats excluent toute influence conjointe significative du style parental et de la participation parentale sur la performance scolaire des étudiants (F=2.56, P>0.05), la participation parentale exerçant davantage d'influence sur la performance scolaire que le style parental. Se fondant sur ces résultats, l'étude propose aux autorités d'éduquer les parents sur le rapport entre style parental et performance scolaire et aux parents de s'impliquer davantage dans la vie scolaire de leurs enfants pour mieux les aider.

MOTS-CLÉS

Performance scolaire, style parental, participation parental, influence, école secondaire, étudiants

INTRODUCTION

Family is the basic and vital structure of the society that has an important role in children's life and their progression in the society. Parents play vital roles in the family which help in enhancing their children's academic outcomes. The roles played involve the provision of financial support, emotional support, and motivational supports and as well make sure their children acquire the best form of education (Jaiswal & Choudhuri, 2017). The importance of the family as a social structure is a thing of great concern. Though children are affected by society and peers, but they are mostly influenced by the family from which they grow being the first unit of socialization. The influence of the family on the child and its roles in creativity, cultural, social, and moral aspects are very great and important (Jaiswal & Choudhuri, 2017; Zahedani et al., 2016). The conditions with which the children get to grow up with in the family affect the child's academic performance and life chances. Several factors affect the academic performance of students of which parenting style and parental involvement are significant factors. Parental involvement simply described the interaction between parents and children at home and this positive interaction is believed to have substantial effects on children's academic performance (der Vorst et al., 2006; Jaiswal & Choudhuri, 2017).

Parenting style on the other hand, described a set of behaviours, attitude and emotional climate in which parents raise their children (Shute et al., 2011). In a family, the nature of parenting style adopted by parents and their involvement in the upkeep of their children combine to have a considerable influence on the children's cognitive development and academic performance. This is apparent as the existence of positive and balanced relationship between parents and their children is one of the factors influencing both their physical and mental health (Zahedani et al., 2016). Studies have shown that interaction between children and parents and how parents communicate with children are considered to be the most important and fundamental factors among the various factors that affect children's fostering and healthy character (Kimble, 2014). Children that have a warm and secure relationship with their parents,

parental control efforts are effective in preventing children from becoming involved in problem behaviours. Thus, the attachment relationship goes hand in hand with parenting. More specifically, parents who adequately control and supervise their children might prevent them from involving in delinquent behaviours. When children are also highly attached to their parents, this attachment relationship might strengthen the impact of control on their studies and this will have significant influence on their academic performance. This study is therefore aimed at examining the influence of parenting style and parental involvement on secondary school students' academic performance in Oriade Local Government Area, Osun state, Nigeria In the course of the study, answers were provided to the following research questions:

- 1. Would parenting style have influence students' academic performance?
- 2. Would parental involvement play a role on students' academic performance?
- 3. What is the joint contribution of parenting style and parental involvement in students' academic performance?

REVIEW OF RELATED LITERATURE

Several studies have been carried out to examine the influence of parental involvement and parenting style on children's academic performance. Parenting style has been recognized as the most important construct in the development of students' social and academic achievement. Parents adopt various style in rearing their children, and this might positively or negatively impact on the children's academic generally. Baumrind (1991) Identified three types of parenting styles to include; authoritarian, permissive, authoritative parenting styles. Authoritarian parents are conservative, conformist and norm abiding. Turner (2009) described authoritarian parenting style as a system of military regime. Children here are likely to perform high academically because they know their parents expect so much from them. Such children, might end up becoming introverts, and timid.

The permissive parent is a friend rather than parents to their children. Permissive parents are very lenient with their children and so such children perform poorly academically since there is no supervision from the parents. The authoritative parenting style also referred to as democratic parenting, attempts to understand the children and endeavour to teach them to understand their feelings, solve problems and be independent. Authoritative parents are very supportive and interested in their children academic performance (Turner, Chandler, & Heffer, 2009). Children here are academically sound and goal oriented. They could easily discuss academic issues with their parents.

Three specific components of authority responsible for contributing to a healthy psychological development and school success of adolescence, have been identified to include parental acceptance or warmth, behavioural supervision, strictness and psychological granting of democracy (Steinberg et al., 1992). Their study revealed a high correlation between authoritative parenting and students' academic performance. However, their study indicated a good predictor of academic achievement among African-American families, where culture played a significant role between parents' parenting style and adolescents' academic performance.

Matejevic, Jovanovic and Jovanovic (2014) studied parenting style, involvement of parents in school activities and adolescents' academic achievement and found that an authoritative parenting style was characteristic for mothers which correlated with higher involvement in school activities and a greater success of adolescents. An authoritarian parenting style was dominant for fathers, and it also correlated with a lack of time necessary for involvement in school activities. Also, Matejevic and Stojkovic (2012) reported low, but statistically significant correlation between the democratic parenting style of a mother and a

very good success of adolescents in school and between the democratic parenting style of a mother and excellent school success of adolescents. The results revealed that authoritative parenting style was directly connected to better school performance. The research of Turner et al., (2009) showed that authoritative parenting style is a predicator of adolescents' success at college. The study carried out by Ibukunolu (2013) showed that there was a significant difference between the academic achievement of students from democratic and autocratic parenting homes. Also, a significant difference existed between the level of involvement of parents of male and female students.

In a meta-analysis study Jeynes (2007) found an association of parental involvement with increased achievement among urban secondary school students in their education. The study showed the importance of parenting style in the achievement of students positive relationship between parenting style (gives as supportive, helpful, and maintaining an adequate level of discipline) and secondary school students' academic performance. In another meta-analysis, Jeynes (2007) found an association of parental involvement with increased achievement among urban secondary school students. Darko (2018), supported the finding that parenting style significantly influence children academic performance. The study revealed a negative relationship between the permissive parenting style and academic performance of participants. The study further indicated no significant difference among authoritative, authoritarian and permissive parenting style and academic efformance of students. Similar result was reported by (Nyarko, 2011).

Parental involvement in the academic performance/achievement of students has remained the focus of academic research, policy makers, educators and public debate. Lemmer, (2012) stated that because of the varying needs and circumstances from one country to another, the role of parents in education has been identified differently. Nadenga (2015), described parental involvement as awareness of and involvement in school work, understanding of the interaction between parenting skills and the student success in schooling and a commitment to students. Parental involvement has been categorise into two forms; home based and school based. According to Altschul (2012), home based parental involvement include assisting students with homework, engaging them in talks concerning the school having high expectations, encouraging school success and providing conducive environment for learning. On the other hand, school based parental involvement include volunteering at school, taking part in school events and school organisations as well as maintaining communication with teachers and school staff.

Nadenga (2015) indicated a significant positive correlation between good parent-teacher relationship and parents involvement in their children and their academics. A very strong correlation of parental involvement in education and the academic performance was reported by Juma (2016). Oslen and Fulle (2010) mentioned that parental involvement is beneficial to students who consistently completed their home-work. McNeal Jr's (2014) demonstrated that parental involvement in the form of Parent Teacher Organisations meetings has a strong association with 8th grade students' science achievement. However, it had a weak or no significant relationship with absenteeism, homework and truancy.

Zakaria et al. (2013) identified interaction and communication, parenting practices, leisure, openness, and acceptance as predictive factors of parental involvement and are positively related to students' achievement. Similarly, Katz, Kaplan and Buzukashvily (2011) listed parents behaviour such as competence, beliefs and positive attitude towards the task of homework, support the children's psychological needs and they positively relate to children's autonomous motivation for doing their homework. Amprosah et al. (2018) indicated a positive association of students' academic performance with parental involvement. Vijaya (2016) observed that students whose parents are actively involved in their academic are better both in behaviour and academic performance.

Some other studies have reported negative/low association between parental involvement and students' academic performance, (e.g. Domina 2005); Hill and Tyson (2009) in a meta analytical study, indicated that parents' school based involvement (e.g. volunteering at school and presence at school events) had a moderate association with achievement. On the other hand, Fan (2001) revealed that communication with teachers had a negative association with students' academic. performance. Tokac and Kocayoruk (2012) showed that parents' attendance at school events negatively impacted on middle school students' achievement in Maths. They suggested that this adverse effect might be that parents collaboration could pressure the students and this affected students' achievement.

Research has shown that the strength of the association of parental involvement and students' academic performance seem to decrease from elementary level to upper school level (Fan & Chen, 2007). Antoine (2015) reported a declining parental involvement as students' progress to higher classes. This can be attributed to growing age that comes with increase liberty, parents' poor time management and parents' perception of their children' maturity level.

These studies and several others showed that parental involvement and parenting style to a large extent, have positive influence on children's academic performance. This is because parenting style develops and moulds the child in the right direction and parental involvement makes the child to be connected to his/her parents, and through this process, the child can freely communicate his/her school challenges.

METHOD

Research Design

The research design adopted for the study was the descriptive design of the ex-post type.

Population

The target population for the study comprised all senior secondary school students in Oriade Local Government Area, Osun state, Nigeria.

Sample and Sampling Technique

The simple random sampling technique was used. 10 secondary schools were randomly selected. From the 10 schools, thirty (30) students each were randomly selected. Three hundred respondents constituted the study sample. The ages of the respondents ranged between 13 and 20 years. Their mean age and standard deviation were 16 and 5 years respectively. Gender distribution was 146 males and 154 females.

Instrument

The study utilized two instruments; Determinants of Academic Performance Questionnaire (DAPQ) and Students' Scores in English Language and Mathematics to understand the joint role of parenting style and parental involvement on students' academic performance. The DAPQ developed by the researchers contained three sections; A, B and C. Section A sought demographic information of respondents, section B, contained 20 items which assessed, parenting style (example of an items is 'my parent/guardian favour punitive measure), while section C comprised 20 items design to assess parental involvement, (example of an item is, my parent/guardian visit my school to get some information about my progress e.g. open day). The items were formatted on a four point scale with responses ranging between Strongly Disagree (SD)=1 and Strongly Agree (SA)=4. The questionnaire demonstrated construct validity and a reliability index of 0.85.

The scores of the students were converted to standard scores (Z-scores) since they were graded by different teachers. Without standardized scores, it is difficult to make comparisons. The Z-scores were further converted to transformed scores (T-Score) to remove the negative values and decimal fractions that showed up (Onongha, 2015; Siegle, 2013). T-scores (Transformed Scores) are used to standardize the raw scores. The conversion was necessary in order to ensure their reliability and validity since they were obtained from different secondary schools (Onongha, 2015). The z-score conversion formula is given as follows:

$$Z = \frac{X - \overline{X}}{s}$$

Where: Z = Standard score, X = Raw score of student in the subject, $\overline{X} = Average$ or Mean Score of the level or cohort, s = Standard Deviation of the level or cohort

Thus, in order to convert a Z-score to a T-score, we multiple the Z-score result by 10 and add 50 (Siegle, 2013).

Procedure

The researchers sought and obtained permission from the principals, class teachers as well as the consent of the respondents. Copies of the questionnaires were administered by the researchers. The administration exercised lasted for a period of one week.

Data Analysis

Data collected were subjected to Bivariate and multiple regressions statistical methods.

Variable transformation for parametric test

In order to make the data suitable for parametric test, items in the questionnaire deemed appropriate for selection were transformed or recoded into dummies of 1 for Agree and 0 for disagree (Alkharusi, 2012; Winship & Mare, 1984). Responses of strongly agree and agree were taken as 1, and others as 0 (strongly disagree and disagree). Also, students' performance was recode into 1 for scores >50 and 0 for score <50.

RESULTS

Research Question One

Would parenting style influence students' academic performance?

Bivariate regression analysis was employed to provide answer to the first research question. For the analysis, the independent variable was parenting style, while students' academic performance was the dependent variable. Items on a Likert Scale were used to measure parenting style, while students' academic performance was obtained using scores in English Language and Mathematics. Result obtained is shown in Table 1 and it showed that 8.4 per cent of the variation in students' academic performance is explained by parenting style. The Analysis of Variance (ANOVA) result indicated that parenting style had no significant influence on students' academic performance (F=0.478, p>0.05). This decision is consequent upon the probability value of 0.49 being greater than 5% significance level or because the calculated Fratio of 0.478 is lowers than the critical F-ratio of 3.87. The regression coefficient revealed a positive association implying that an increase in parenting style will bring about a corresponding increase in students' academic performance.

Independent variable	Coefficients		
	В	В	t-value
Parenting style	0.050	0.040	0.691
Test results			
F- value	0.478		
R	0.290		
R ²	0.084		
Constant	0.450		6.955

TABLE 1Summary of bivariate regression

*Significant at 0.05 significance level; Critical F-ratio=3.87 df=1/298

Research Question Two

Would parental involvement play a role on students' academic performance?

Independent variable	Coefficients		
	В	В	t-value
Parental involvement	0.732	0.325	5.934*
Test results			
F- value	35.218*		
R	0.325		
R ²	0.106		
Constant	0.015		0.910

TABLE 2Summary of bivariate regression

*Significant at 0.05 significance level; probability value=0.000; Critical F-ratio=3.87 df=1/298

Bivariate regression analysis was employed to provide answer to the second research question. For the analysis, the independent variable was parental involvement, while students' academic performance was the dependent variable. Result obtained is parented in Table 2 and it revealed that 10.6 per cent of the variation in students' academic performance is explained by parental involvement. The Analysis of Variance (ANOVA) result further indicated that parental involvement has a significant influence on students' academic performance (F=35.218, p<0.05). This decision is consequent upon the probability value of 0.000 being lower than 5% significance level or because the calculated F-ratio of 35.218 is greater than the critical F-ratio of 3.87. Further, result of the unstandardized regression coefficient indicated that a unit increase in parental involvement would bring about 73.2 per cent of the increase in student's academic performance. The result obtained therefore provided answer to the second research question

and it indicated that parental involvement had significant influence on students' academic performance.

Research Question Three

What is the joint influence of parenting style and parental involvement in students' academic performance?

Independent variable	Coefficients		
	В	В	t-value
Parental involvement Parenting style	0.325 0.203	0.177 0.083	2.125* 0.994
Test results			
F- value	2.561		
R	0.381		
R ²	0.145		
Constant	0.385		2.784*

TABLE 3Summary of multiple regression

*Significant at 0.05 significance level; probability value = 0.000; Critical F-ratio = 3.87

Multiple regression analysis was employed to provide answer to the third research question. For the analysis, the independent variables were parenting style and parental involvement, while students' academic performance was the dependent variable. Items on Likert Scale were used to measure parenting style and parental involvement; scores of students on mathematics and English Language were used to measure academic performance. Result obtained is shown in Table 3 and it indicated that 14.5 per cent of the variation in students' academic performance is explained by parenting style and parental involvement. The Analysis of Variance (ANOVA) result further indicated that parenting style and parental involvement have no joint significant influence on students' academic performance (F=2.561, p>0.05). This decision is consequent upon the probability value of 0.079 being higher than 5% significance level or because the calculated F-ratio of 2.561 is less than the critical F-ratio of 3.87. The significance of each of the predictors (parenting style and parental involvement) was also examined using t-test as shown in Table 3. The result revealed that between the two variables, only parental involvement exerted significant influence on students' academic performance (t=2.125, p<0.05). Parenting style did not exercise significant influence on students' academic performance (t=0.994, p>0.05). Further, result of the unstandardized regression coefficient indicated that a unit increase in parental involvement holding parenting style constant would result in 32.5 per cent increase in students' academic performance, while a unit increase in parenting style would bring about 20.3 per cent of the increase in student's academic performance.

DISCUSSION

Though, the first research question revealed that parenting style did not significantly influence students' academic performance, the positive sign means it can bring about a considerable positive change in students' academic performance. Several studies like those of Lamborn et

al., (1991) and Besharat, Azizi and Poursharifi (2011) have documented that parenting has a powerful influence on child development and is often associated with child outcomes including school-relevant outcomes. Parenting styles is the pattern of behaviour that primary caregivers use to interact with their children. These patterns of childrearing create an emotional climate in which the parent's behaviours are expressed (Besharat et al., 2011; Coplan et al., 2002). Ofosu-Asiamah (2013) stated that parents are stakeholders in education and the nature of parenting and relationship between themselves and their children have the capacity to impact their cognition and learning abilities at the early stages of the child's life. Also, Bradley and Caldwell, (1995) cited in Ofosu-Asiamah (2013) noted that parents really do have profound and long-lasting effects on their children's capacity for happiness, and some styles of parenting tend to promote the development of happiness, while others do the opposite. That is, parenting which is the regulation of behaviour and development of children, with the intention that they can live a socially desirable life, adapt to their environment, and pursue their own goals.

Result of the second research question indicated that parental involvement impacted positively and significantly on student's academic performance. Parental involvement is an essential factor that affects students' cognitive development and academic performance. Parents who spend more time with their children and are able to meet their school needs and other needs positively impacted on the child's academic performance. Chowa Masa and Tucker (2013) reported that the level of parental involvement has important implications for children's academic performance. Social cognitive theory suggested that youths absorb messages about appropriate behaviour and socially accepted goals by observing and talking with important people in their lives. Based on this assumption, parents have the potential to model positive attitudes and behaviours toward school. Research in developed countries such as the United States has shown that parental involvement contributes to youth's academic success (Houtenville & Conway, 2008). Similarly, Topor et al., (2010) stated that parent involvement in a child's education is consistently found to be positively associated with a child's academic performance. Specifically, children whose parents are more involved in their education have higher levels of academic performance than children whose parents are involved to a lesser degree. The influence of parental involvement on academic success has not only been noted among researchers, but also among policy makers who have integrated efforts aimed at increasing parent involvement into broader educational policy initiatives. Researchers have reported that parent-child interactions, specifically stimulating and responsive parenting practices, are important influences on a child's academic development (Committee on Early Childhood Pedagogy, 2000 cited in Topor et al., 2010). Increased parental involvement is significantly related to a child's increased perception of cognitive competence. This finding is consistent with previous studies (Gonzalez-DeHass, Willems, & Holbein, 2005).

Result of the third research question indicated that parenting style and parental involvement are positively related to student's academic performance. Though, the result revealed insignificant influence of parenting style, but the positive signs implied that the two variables have some influence on students' academic performance. The positive association among parenting style, parental involvement and academic performance of students is consistent with the studies of Topor et al., (2010) and Ofosu-Asiamah (2013) as explained above. Ofosu-Asiamah (2013) reported that parenting style have the capacity to impact on children's cognition and learning abilities at the early stages of the child's life. However, parental involvement is found by the present study to exert more influence on students' academic performance than parenting style. This is expected as parental involvement makes the child to be motivated and ready to study because the parents or one of the parents is involved in the child's education. When parents are involved in their children's education, they get to know the needs of their children, their mental abilities and as such are able to devise ways of

managing the problems as well as encourage the children. This will enhance their performance in school.

CONCLUSION

The study demonstrated no significant influence of parenting style on students' academic performance. However, parental involvement has a positive significance on students' academic performance. Jointly, both parenting style and parental involvement had no significant influence on students' academic

RECOMMENDATION

Based on the findings of the present study, the following recommendations were made:

- 1. Parents should get involved in their children's school work/activities. This will motivate and encourage the children in their academic pursuit
- 2. The school authorities should endeavour to educate the parents on the practices regarding parenting style and children's academic performance.
- 3. The students/children should see their parents as their friends, they can freely talk to about any issue.
- 4. Counsellors should avail themselves to the parents and children on all matters especially those related to parental involvement, parenting style and children's academic performance. This relationship can mar or make the parent-child relationship.

REFERENCES

Alkharusi, H. (2012). Categorical variables in regression analysis: A comparison of dummy and effect coding. *International Journal of Education*, 4(2), 202-210.

Altschul, I. (2012). Linking socioeconomic status to academic achievement of Mexican youth through parent involvement in education. *Journal of the Society for Social Work and Research*, *3*, 13-30.

Amponsah, M. O., Milledzi, E. Y., Ampofo, E. T., & Gyambrah, M. (2018). Relationship between parental involvement and academic performance of Senior High School students: The case of Ashanti Mampong Municipality of Ghana. *American Journal of Educational Research*, 6(1), 1-8.

Antoine, D. R. (2015). *The correlation between parental involvement and students' academic achievement*. LSU Master's These, Louisiana State University and Agricultural and Mechanical College, USA.

Baumrind, D. (1991). Parenting styles and adolescent development. In R. M. Lerner, A. C. Peterson & J. Brooks-Gunn (Eds.), *Encyclopedia of adolescence* (pp. 758-772). New York: Garland.

Besharat, M. A., Azizi, K., & Poursharifi, H. (2011). The relationship between parenting styles and children's academic achievement in a sample of Iranian families. *Procedia Social and Behavioral Sciences*, 15(2011), 1280-1283.

Chowa, G., Masa, R., & Tucker, J. (2013). The effects of parental involvement on academic performance of Ghanaian youth: Testing measurement and relationship using structural equation modeling. *Children and Youth Services Review*, *35*(12), 2020-2030.

Coplan, R. J., Hastings, P. D., Lagace-Seguin, D. G., & Moulton, C. E. (2002). Authoritative and authoritarian mother's parenting goals, attributions, and emotions across different childrearing contexts. *Parenting: Science and Practice*, *2*, 1-26.

Darko, R. (2018). Influence of parenting styles on academic performance of Senior High Schools in Ghana. *International Journal or Research and Innovation in Social Science*, 2(6), 110-117.

der Vorst, H. V., Engels, R. C. M., Meeus, W., Dekovic, M., & Vermulst, A. D. (2006). Parental attachment, parental control, and early development of alcohol use: A longitudinal study. *Psychology of Addictive Behaviours*, 20(2), 107-116.

Domina, T. (2005). Leveling the home advantage: Assessing the effectiveness of parental involvement in Elementary School. *Sociology of Education*, 78, 233-249.

Fan, X. (2001). Parental involvement and students academic achievement: A growth modeling analysis. *Journal of Experimental Education*, 70, 27-61.

Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review*, 13(1), 1-22.

Gonzalez-DeHass, A. R., Willems, P. P., & Holbein, M. F. (2005). Examining the relationship between parental involvement and student motivation. *Educational Psychology Review*, *17*, 99-123.

Hill, N., & Tyson, D. F. (2009). Parental involvement in middle school: A meta-analytic assessment of the strategies that promote Achievement. *Developmental Psychology*, *45*(3), 740-763.

Houtenville, A., & Conway, K. S. (2008). Parental effort, school resources, and student achievement. *Journal of Human Resources*, 43(2), 437-453.

Ibukunolu, A. A. (2013). Parenting style and students academic achievement in junior secondary schools in Ogun State, Nigeria. *Journal of Emerging Trends in Educational Research and Policy Studies*, 5(1), 20-24.

Jaiswal, S. K., & Choudhuri, R. (2017). A review of the relationship between parental involvement and students' academic performance. *The International Journal of Indian Psychology*, 4(3), 111-123.

Jeynes, W. (2007). The relationship between parental involvement and urban secondary student academic achievement: A meta-analysis. *Urban Education*, 42(1), 82-109.

Juma, S. O. (2016). Influence of parental socio-economic status on students' academic performance in public secondary schools in Tana River County, Kenya. PhD Thesis, University of Nairobi, Kenya.

Katz, I., Kaplan, A., & Buzukashvily, T. (2011). The role of parents' motivation in students' autonomous motivation of doing homework. *Learning and Individual Differences*, *21*, 376-386.

Kimble, B. A. (2014). *The parenting styles and dimensions questionnaire: a reconceptualization and validation*. Retrieved from https://shareok.org/bitstream/handle/11244/14936/Kimble_okstate_0664M_13607.pdf?sequen ce=1.

Lamborn, S. D., Mounts, N. S., Steinberg, L., & Dornbusch, S. M. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development*, *62*, 1049-1065.

Lemmer, E. M. (2012). Who's doing the talking? Teacher and parent experiences of parent-teacher conference. *South African Journal of Education*, 32(1), 83-96

Matejevic, M., & Stojkovic, J. (2012). Educational style of parents and success in school of young adolescents. *Teaching Innovations*, 25, 3746.

Matejevic, M., Jovanovic, D., & Jovanovic, M. (2014). Parenting style, involvement of parents in school activities and adolescents' academic achievement. *Procedia - Social and Behavioral Sciences*, *128*, 288-293.

McNeal, Jr. R. B. (2014). Parental involvement, achievement and the role of student attitudes and behaviours as mediators. *Universal Journal of Educational Research*, 2(8), 564-576.

Nadenga, M. G. (2015). Relationship between parental socio-economic status and student academic achievement: A case study of selected schools in urban informal settlements in Westland division, Nairobi County. University of Nairobi, Kenya.

Nyarko, K. (2011). The influence of authoritative parenting style on adolescents' academic achievement. *American Journal of Social and Management Sciences*, 2(3), 278-282.

Ofosu-Asiamah, D. K. (2013). *Examining the effects of parenting styles on academic performances of senior high school students in the Ejisu-Juaben municipality, Ashanti region*. Retrieved from http://dspace.knust.edu.gh/bitstream/123456789/6533/1/Daniel%20Kofi%20O fosu-%20Asiamah.pdf.

Onongha, G. I. (2015). Family type (monogamy and polygamy) and academic performance of students: The case of students in Cross River, Nigeria. *Open Science Journal of Education*, 3(4), 20-25.

Oslen, G., & Fulle, M. L. (2010). *The benefits of parental involvement: What research has to say?* Retrieved from https://www.education.com/reference/article/benefits-parent-involvementresearch/.

Shute, V. J., Hansen, E. G., Underwood, J. S., & Razzouk, R. (2011). A review of the relationship between parental involvement and secondary school students' academic achievement. *Education Research International*, 2011, 1-10.

Siegle, D. (2013). *Standardized scores*. Retrieved from http://www.gifted.uconn.edu/siegle/research/normal/interpret%20raw%20scores.html.

Steinberg, L., Lamborn, S., Dorbusch, S., & Darling, N. (1992). Impact of parenting practices on adolescent achievement: Authoritative parenting, school involvement and encouragement to succeed. *Child Development*, *63*, 1266-1281.

Tokac, U., & Kocayoruk, E. (2012). Exploring effects of parent involvement on students' achievement. *International Journal, Social Science and Education,* 2(2), 257-263.

Topor, D. R., Keane, S. P., Shelton, T. L., & Calkins, S. D. (2010). Parent involvement and student academic performance: A multiple mediational analysis. *Journal of Prevention & Intervention in the Community*, *38*(3), 183-197.

Turner, L. A (2009). The influence of parenting style on adolescent competence and substance use. *Journal of Early Adolescence*, 11(11), 56-95.

Turner, E. A., Chandler, M., & Heffer, R. W. (2009). The influence of parenting styles, achievement motivation, and self-efficacy. *Journal of College Student Development*, *50*(3), 337-346.

Vijaya, R. (2016). Parental involvement and academic achievement among High School students. *Review of Research*, 5(12), 1-4.

Winship, C., & Mare, R. D. (1984). Regression models with ordinal variables. *American* Sociological Review, 49(4), 512-525.

Zahedani, Z. Z., Rezaee, R., Yazdani, Z., Bagheri, S., & Nabeiei, P. (2016). The influence of parenting style on academic achievement and career path. *Journal of Advances in Medical Education and Professionalism, 4*(3), 130-134.

Zakaria, A. R., Hasim, Z., Salleh, U. K., & Yusoff, J. Z. (2013). Family context and its relationship with parental involvement in the education of Secondary School children. *International Journal of Asian Social Science*, *3*(4), 1063-1076.