
NEW HORIZON IN ACADEMIC PERFORMANCE OF STUDENTS IN TERTIARY INSTITUTIONS IN SOUTH-EAST NIGERIA

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Abstract

Education, in a broad sense is an act or experience that has a formative effect on human mind, character or physical ability of any individual. This paper seeks to find out the possible measures of academic performance of students (APS) and some of these are; Parental Education (PE), Parental Income (PI), Parental Occupation (PO), Peer Group (PG), Quality of School (QS) and Environment (ENV) and so on. In recent time, there has been an argument on the relationship between academic performance of students and the socio-economic background (SEB) of their parents. This study takes an in-depth review of related theories and empirical studies. Differences in their performance of students from different socio-economic group(s) have over time been related to the differences in their parent's social class. They are of the opinion that social or economic background of parents cannot be evaluated without the inclusion of their political position as well. Directly or indirectly, these have affected the performance of students particularly in south-east where majority of the population are predominantly farmers, fishermen and petty traders that constitute the largest population in the region. This paper tries to find solutions to these questions. They are; what is the influence of parent's education on student's academic performance? What influence does parental financial background have on student's academic performance? Does parental occupation and group association significantly influence academic performance of students? Specifically, this study seeks to investigate the influence of parent's education on student's academic performance, to examine the effect of parental financial

background on student's academic performance and to determine if parental occupation and group association have significant influence on academic performance of students. Also, the findings of this study may enhance the understanding of corporate organizations and first class citizens in the country to rise on the fight against poverty and inequality through the establishment of scholarship scheme that could aid students in lower socio-economic background.

Keywords: Socio-Economic Background (SEB), Parental Education (PE), Parental Income (PI), Parental Occupation (PO), Peer Group (PG) and Quality of School (QS)

Introduction

Academic accomplishment is an important parameter in measuring success or outcome in students. Academic success greatly influences student's self-esteem, motivation and perseverance. According to Cambridge University, poor academic performance or high rate of failure is directly related to disparities in social, psychological, environmental and economic status of students and this may result in gradual reduction of the size of a work force that occurs when personnel lost through retirement or resignations are not replaced. In addition, Crosnoe, Johnson and Elder (2004) argued that other than internal factors (family and students attitude), external factors such as school and peer group, cannot be neglected in the discussion of students performance and quality of education in tertiary institutions. Therefore, parental values, religion and socio-economic background (SEB) have either facilitating or inhibitory effect on the performance of students depending on the traits inherited and environment in which they are brought up. Be that as it may, Hill et al. (2004) expresses disagreement on the relationship between SEB and academic performances of students. They believe that differences in SEB of families do not affect the academic performance, but makes it possible for student from low SEB to compete strongly with their counterparts from high SEB under the same academic environment. They are of the view that home background (e.g. polygamy, single parent's households, divorce, family size) affect student's life outside the school especially home learning. Despite the digression, Hill et al. (2004) recognized the vital role of finance on students' academic performance. Hence, a student whose parents are illiterate and poor, with no educated sibling, access to the electronic information, faces a difficult task in his educational pursuit and academic performance than students whose parents and siblings are educated and financially stable with great access to educational resources.

This deficiency has raised serious concern amongst many government authorities to unravel the effect on the academic performance of students from low and higher

socioeconomic background. The quest on the consequences of the differences in academic performance of students in tertiary institutions created by the differences in SEB has been prevalent in Nigeria. This had led to increasing investigation on the challenges and prospect of its degeneration in the educational sector. Though, many studies such as Aikens and Barbarin (2010), Hackman (2009), Tandon et al. (2012), Bradley (2002), Aikens and Barbarin (2010) and Evans (2004) have attributed the disparity mainly in the academic performance of bourgeoisie and proletariat children to many other factors. Essentially, they argued that the differences in SEB also suggest differences in family income, education level of parents, occupation, group associations and their level of societal influence. As such, students from families with such characteristics in some situation are well prepared and have more access to a wide range of academic resources, than those students whose parents have no ownership of means of production but dependent on the sale of their labour power and the earnings from farm produce for financing their children education.

The findings may promote the understanding of parents whose socioeconomic status is low on their involvement in monitoring the activities of their children both in and outside the home. This is important because empirically, peer group has a strong and negative influence on academic performance of students (Crosnoe et al. 2004, Aikens and Barbarin, 2010 and Hackman, 2009). Therefore, the outcome of the study could show how significant it is for parents to be involved in the academic activities of their children, since socioeconomic background measures such as income, occupation, educational level and group association may not be the only determinant of students' academic performance. Other factors such as home lesson, group discussion, parent's home assistance and extra reading after class room work may promote better performance academically. It will be of immense benefit to the educational planners as there will be awareness through publication of the outcome of this study. The knowledge that will be gain from the outcome of this study could help students to understand the need to pay less emphasis on the type of job their parents engaged in as to enable them see reason(s) to pay more attention to their studies. The outcome will be of significance to school counselors so that they can provide the needed counseling to students that the profession of their parents has nothing to do with their academic performance but other factors like intelligence or diligence are key factor for academic performance excellent. We are going to look at the under listed theories.

Maslow's Motivational Theory

The theory shows how; "basic needs must be met before one can climb the hierarchy", to address more complex needs. He assumed that the first and the most important is for one to meet the basic physiological need for food, water and warmth, and after which,

the need to be safe, the need to belong to social groups and others, to attend the hierarchy would emerge. According to the theory, each human being is motivated by needs that are inborn, most probably resulting from many years of development. The Maslow theory of motivation suggests a hierarchy of needs such as; physiological needs, safety needs, social needs, self-esteem needs and the need for self-actualization. The first discussed the basic needs which he referred to as air, water, food, sleep, among others. He perceived the physiological needs as the key because he assumed that if they are not satisfied, that one may feel sick, irritation, pain, discomfort, etc thereby making the achievement of others difficult. He pointed that the feelings to satisfy the physiological needs motivate us to establish homeostasis tendency to reach equilibrium. Once one attends the physiological needs, we may think about other things like safety needs etc.

Maslow is of the view that hence the actualization of the physiological needs, the feelings for safety and security arises, which has to do with “establishing stability and consistency in an unpredictable world”. The logic behind his claim is that if a family fails to perform its function properly (e.g. child protection from abuse), such family cannot move to the next level because the child for example will continuously be fearful for her safety. Hence, the safety needs is achieved, the desire for belonging, friendship and relationship which is natural and permanent becomes important. In his discussion of “social needs”, he maintained that every human being has the desire to feel loved and accepted by others. As such, human beings have varying degrees of intensity and a strong wish to be associated with others by identifying with groups such as societies, clubs, professional associations, churches and other religious groups.

Human Capital Investment Theory

The human capital investment theory deals with the fundamental issues and has strong influences on the educational achievement of children. Genetic endowments which include sex, race and cultural endowment such as the value parent place on their children affect their educational performance. For instance, some families or societies attached educational attainment with sex. Such families or societies prefer to invest in male than female child. To them investing in female Children’s education is merely a waste of resources, because they will eventually get married to another family. On the other hand, some families invest more on female’s education than their male counterpart with the belief that “he, who educates a girl, educates the entire society”. In this case, any of the two views may likely affect the educational achievement of the opposite sex. However, some parents prefer to invest in their business activities for quick turnover at the expense of their children future well-being. Whereas some parents spend their last penny just to ensure that their

children acquire the best education. Given the overview, Becker (1975) developed the theory of human capital investment in which he outlined the various interactions paths between income and human capital development. According to the theory, rich parents can invest more financial resources in their children's education. Parents' money can also be used to buy better educational quality, which may affect both current educational performance and children's future demand for education.

Systems Theory of Organization

General system theory as propounded by Ludwig von Bertalanffy (1968) is a general science of wholeness. This theory was initially proposed by Ludwig von Bertalanffy in 1940's which were furthered by Ross Ashby in 1964. In the quest to establish this theory, Von Bertalanffy (1968) wrote that "a system is a complex of interacting elements and that they are open to, and interact with their environments". Systems theory is the interdisciplinary study of systems. According to Ludwig von Bertalanffy (1968): A system is an entity with interrelated and interdependent parts; it is defined by its boundaries and it is more than the sum of its parts (subsystem). Changing one part of the system affects other parts and the whole system, with predictable patterns of behavior. Positive growth and adaptation of a system depend upon how well the system is adjusted with its environment, and systems often exist to accomplish a common purpose (a work function) that also aids in the maintenance of the system or the operations may result in system failure. The goal of systems theory is systematically discovering a system's dynamics, constraints, conditions and elucidating principles (purpose, measure, methods, tools, etc.) that can be discerned and applied to systems at every level of nesting, and in every field for achieving optimized equifinality.

This theory believes there are nine levels of complexity for systems and they include; structural framework, clockwork, the cell, the plant system, the animal system, Humans, the social system and the transcendental. Ludwig Von Bertalanffy (1968) is of the view that "the social system is more complex than an individual, more open to environmental influence, more adaptive to circumstance because of collective experience and wider reservoir of skills". Applying is theory in social sciences and education; he extended the discussion to systems theory of organizations by postulating that schools are like other open systems which of necessity engage in various mode of exchange with environment (Katz and Kahn, 1966 as cited in Mwet, 2013). Therefore, Systems theory emphasizes the consideration of the relationships between the school and its environment as well as what goes on within the school (Hall, 1977 as cited in Mwet, 2013). The fundamental concept in the general system theory is the notion of emergence and interaction.

As adapted in this study the systems theory holds that socioeconomic factors influence students' academic performance in a school. According to the proponents of this theory, these factors are parental level of education, parental involvement in children education, income of parent and financial and material support given to the children by the parent. This theory has its own shortcomings, among which is that the theory assumes that the interrelationships within a system have to be recognized and understood by all people involved.

This is because some of the indicators of academic performance such as knowledge transformation, life skills and behaviour modifications of learners have been difficult to capture (Tsinidou, Gerogiannis and Fitsilis, 2010). To this effect, there has not been a consensus on the relationship between level of parents' education level, parental profession, language, quality of school, income, environment, religious affiliations among others indicators and students academic performance. While some argued that quality of education varies from culture to culture (Michael, 1998), others point environment and personal characteristics of learners as an important determinant of academic performance of students. In terms of the environment, it was argued that the school personnel, lecturers, members of the families and communities play significant role in providing help and support to students for the promotion of their academic performance. Thus, social assistance has also been tipped to play a crucial role in the accomplishment of performance goals of students at school (Goddard, 2003). Besides the environment, social structure, parents' involvement in their child's education and others factors mentioned above are claimed to be positively related with the rate of academic success of students (Furstenberg and Hughes, 1995).

Though, this effect is most noticed at the tertiary institutions. Looking at parent's income and education of as a measure socioeconomic background actual performance. Following the works of Rouse and Barrow (2006), Trusty (2000) and Krashen (2005), economic disadvantaged parents are financially incapacitated and were unable to afford finance education for their children at higher levels. Therefore, their evidence shows that students whose parents are educated score higher on standardized tests than those whose parents were not educated. This is because, educated parents communicate with their children better regarding the school work or assignment, and other activities at school than the uneducated ones. Thus, Fantuzzo and Tighe (2000), and Trusty (1999) added that educated parents can assist their children better in their work and participate at school than the uneducated parents.

A comparative study by Ford and Harris (1997) on the parental influence in African American student's academic achievement, focusing on socio-demographic factors shows that children from high socioeconomic background parents are better exposed to a learning

environment at home because of the provision of extra learning facilities. This idea was supported by Becker and Tomes, (1979) when they asserted that high socioeconomic background parents ensure their children future earning by providing them a favourable learning environment and better education. In contrast they concluded that children from low socioeconomic background parents do not have access to extra learning facilities and thus, denying them the opportunity to get to their educational ladder. We concluded that parents' short sightedness toward their responsibilities in the educational achievement of their children and scarcity of fund could be a challenge to their children's academic success. Investigating whether formal, informal and indirect measures of the home literacy environment predict children's reading and language skills. The evidence also shows that latent factors such as maternal language were significant predictors of exposure to storybook but not of direct literacy instruction.

Review of Related Empirical Studies in Nigeria

In Nigeria, there are very few studies in this area especially in the relationship between parent's socio-economic background and academic performance of students in the tertiary institutions. Some of studies in this area emphasize more in factors that determines primary and secondary schools students' academic achievement in Nigeria. However, research has shown that rising social and economic background of parents is highly correlated to the student's academic achievement which serves as a predictor of their economic success later in future. Yet there can be other less tangible elements such as values, religion, cultural cohesion, food security, communication skills, addiction rates and transportation mobility among others that may influence student's academic performance. Other factors such as; ethnicity religious biasness, discrimination, poverty, isolation by dominant group, political instability, resource limitations and war may also affect the academic success of students. It may be reasonable to say that some students with strong and high socioeconomic status may or may not follow their success target due to some odds. This may likely lead to the failure of their academic achievement and retard heir dream of becoming great in the society. In Nigeria, some studies reveal socio-economic background as a strong predictor of student's academic performance both in the primary, secondary and tertiary institution. Measuring academic performance with GPA or CGPA categorized into poor (0 to 2.49) and good (2.50 to 4.00). Aliyu (2016) investigated the influence of socio-economic status on academic achievement of senior secondary school students in Kano State. The findings show a significant relationship between the socioeconomic status and academic achievement. In a similar study but with emphasis on family income, Evans, (2004) found that children from lower income family are exposed to high environmental

risk, less stable homes and violence. As such, parents from this family report lower educational expectations, less monitoring of children's school work and less overall supervision of their social activities compared to students from families with high income. Oni (2007) and Omoegun (2007) observed significant difference between behaviour of students from high and low socioeconomic status. In addition, Adewale (2002) traced the relationship between nutritional status, health and academic performance of students in rural community. He reported that academic performance of students in rural community where nutritional status is low with prevalent health problems is greatly affected. Moreover, Eze (1996) pointed that when a child are have proper nutrition and health care, the ability to interact properly in formal learning environment is enhanced. A study in a sample of selected secondary school in Kwara state on the relationship between home-based environment factors and the academic performance of students were found to positive and statistically significant (Ogunshola and Adewale, 2013). Hence, further investigation established, parent's academic qualifications and student's health status significantly affect student's academic performance, while parental socioeconomic background and education have no significant effect of student's academic performance.

The study also, shows a significant relationship between provisions learning facilities and students' academic performance in vocational courses. It was further discovered that there exist a Significant relationship between students and their perceived academic performance.

Model Specification

Model specification is the determination of which independent variables should be included in a regression. In general, this procedure is associated with the understanding of theories rather than the empirical measures. This knowledge is important in selecting appropriate functional form of the model and the key variables to be included or excluded from the model. This is important because it enable us to avoid specification error and to ensure quality interpretations. Hence, this section discusses and presents regression model for the estimation. For instance, considering the main objective of the study, the functional relationship between academic performance of students (*APS*) and socioeconomic background of parents (*SEB*) is specified. This function indicates the possible measures of academic performance of students (*APS*) and they includes; parental education (*E*), parental income (*PI*), parental occupation (*PO*), peer group (*PG*), quality of school (*QS*) and environment (*ENV*) *ceteris paribus*. However, given the functional form of the existing relationship between the selected variables, the econometric techniques proposed for the evaluation of the specific objectives of the study is shown below. At first, we model the

relationship between parental education and student’s academic performance as presented in equation 1 below.

$$ln(Y) = \beta_0 + \beta_1 X + \epsilon \quad \text{----- (1)}$$

ln(Y) and ln(X) are the natural log of academic performance of students and parental education respectively. ϵ is the unexplained error term or the unpredictable random disturbance term that is supposed to be identically distributed. β_0 and β_1 are the unknown parameters of the model and must be estimated using sample data. Hence, β_0 is the constant while β_1 is the coefficient of parental education (X). This technique enhances the prediction on the value of

$ln(Y)$, based on a given value of $ln(X)$ without the interference of other variables. In addition, adopting the same method as expressed in eqn.1 above, the relationship between parental income/parent’s financial background and student’s academic performance can be estimated using equation 2 as shown below.

$$ln(Y) = \beta_0 + \beta_1 X + \epsilon \quad \text{----- (2)}$$

$ln(X)$ remained as defined above, while $ln(Z)$ is the natural log of parental income/parent’s financial background. ϵ is the error term and; β_0 and β_1 are the unknown parameters of the model. β_0 represents the constant term while β_1 is the coefficient of parental income or parent’s financial background. On the other hand, having established the econometric relationship between parental education, income/finance and academic performance of students ($ln(Y)$) as shown in eqn.1 and 2 above respectively, the third objective of the study will be evaluated with the aid of bivariate econometric model or technique. This will enable us establish the nature of relationship between parental occupation (PO), group association (GA) and academic performance of students, as well as inspect if they have any significant impact on academic performance of students ($ln(Y)$). Thus, the bivariate econometric model is expressed below;

$$ln(Y) = \beta_0 + \beta_1 X + \beta_2 Z + \epsilon \quad \text{----- (3)}$$

$ln(X)$ and $ln(Z)$ are the natural log of parental occupation and group association respectively. β_0, β_1 and β_2 are the unknown parameters of the model. β_0 is the constant term, while β_1 and β_2 are the coefficients of parental occupation and group association

respectively. ϵ ; is the unpredicted error term. In like manner, the addition of more than two variables in the right hand side of eqn.3 above will result to multivariate regression model proposed for the estimation of the fourth objective. Hence, applying the multivariate technique, the nature of the relationship between peer group (PG), quality of school (QS), environment (ENV) and academic performance of students will be investigated. Also, we shall further ascertain if they have significant impact on student's academic performance. However, the econometric representation of this relationship is presented in eqn.4 below.

$$\ln Y = \beta_0 + \beta_1 \ln X_1 + \beta_2 \ln X_2 + \beta_3 \ln X_3 + \epsilon \quad (4)$$

$\ln X_1, \ln X_2, \ln X_3$; are the natural log of peer group, quality of school and environment respectively. $\beta_0, \beta_1, \beta_2, \beta_3$; are the unknown parameters of the model. β_0 ; is the constant. $\beta_1, \beta_2, \beta_3$; are the coefficient of the explanatory variables in the model. ϵ ; is the error term.

Furthermore, in our attempt to examine the impact of all the selected indicators of academic performance of students and the degree of association between these variables.

References

Adewale, A. M (2002) "Implication of parasitic infections on school performance among school-age children", *Journal of science education*, Vol.2pp. 78-81.

Aikens, N and Barbarin, O (2010), "Socioeconomic Differences in Reading Trajectories: The Contribution of Family, Neighborhood, and School Contexts", *Journal of Educational Psychology*. 100 (2): pp.235–251

Aikens, N. L and Barbarin, O (2008), "Socioeconomic Differences in Reading Trajectories: The Contribution of Family, Neighborhood, and School Contexts", *Journal of Educational Psychology*, 100 (2), pp. 235–251; doi:[10.1037/0022-0663.100.2.235](https://doi.org/10.1037/0022-0663.100.2.235)

Ali, H. O (2013), "Factors Affecting Students' Academic Performance in Mathematical Sciences Department in Tertiary Institutions in Nigeria" *US-China Education Review*, Vol. 3, No. 12, Pp.905-913

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- Becker & Tomes, N. (1979) An equilibrium theory of the distribution of income and intergenerational mobility. *Journal of political economy*, 87,1153-1189.
- Becker, G. (1975), "Human capital", Chicago: Chicago University Press.
- Becker, G., & Tomes, N. (1986), "Human capital and the rise and fall of families", *Journal of Labor Economics* 4, 21-39.
- Crosnoe, R., Johnson, M. K., & Elder, G. H. (2004). School size and the interpersonal side of education: An examination of race/ethnicity and organizational context. *Social Science Quarterly*, 85(5), 1259-1274.
- Crosnoe, R., Johnson, M. K. and Elder, G. H. (2004), "School size and the interpersonal side of education: An examination of race/ethnicity and organizational context", *Social Science Quarterly*, 85(5), 1259-1274.
- Crosnoe, R., Monica, K. J and Glen, H .E .Jr. (2004). School size and the interpersonal side of education: An example of Race/Ethnicity and organizational context. *Social Science Quarterly*, 85(5).
- Danesty, A. H and Okediran, A (2002), "Etiological factors and effects of street working behaviour among Nigerian youth", *Journal of Social Problem*, School of Arts and Social Science F.C.E. (special) Oyo, 2: 1.
- Elsje, V. B., Zuijen, T. V., Bishop, D and De Jong, P. F (2016), "Why Are Home Literacy Environment and Children's Reading Skills Associated? What Parental Skills Reveal", *Reading Research Quarterly*, 52(2), pp. 147–160, doi:10.1002/rrq.160
- Evans, G. W (2004), "The Environment of Childhood Poverty", *American Psychologist*, 59, pp.77-92; <http://dx.doi.org/10.1037/0003-066X.59.2.77>
- Eze, O. M (2002), "The effects of parental economic status and pupil sex on school achievement in English language", *Journal of Vocational and Technical Education in Nigeria*, Vol. 3 No.3 p.27

- Eze, P.N (2009), Effects of peer Assessment on students' achievement and interest in French. An unpublished Ph.D Thesis. University of Nigeria Nsukka.
- Fantuzzo, J and Tighe, E (2000), "A family involvement questionnaire", *Journal of Educational Psychology*, 92(2), pp.367-376.
- Ford, D. Y. Harris J. J. (1997). A study of the social identity and achievement of black males and female Roeper Rev. 20, 105 – 110.
- Hill, N.E; Castelino, O.R.; Lansford. J.E.; Nowlin, E.; Dodge, P.; Bates, K.A. and Pettit, G.S (2004). Parents academic involvement as related to school behaviour, achievement and aspirations: Demographic variations across adolescence. *Child development* (2004) Vol. 75(5):1491-1509.
- Jensen, E. (2013), "How poverty affects classroom engagement", *Educational Leadership*, 70 (8), pp.24-3
- Kainuwa, A., & Yusuf, N. B. M. (2013). Influence of Socio-Economic and Educational Background of Parents on their Children's Education in Nigeria. *International Journal of Scientific and Research Publications*, 3(10), 1-8.
- Kainuwa, A and Yusuf, N. B. M (2013), "Influence of Socio-Economic and Educational Background of Parents on their Children's Education in Nigeria", *International Journal of Scientific and Research Publications*, Volume 3, Issue 10
- Mweti, J.M. (2013), "Socio-economic factors influencing student's academic performance in public secondary schools in Igembe south district, Kenya", Unpublished M.ED Project, University of Nairobi
- Ogunshola, F and Adewale, A. M (2013), "The Effects of Parental Socioeconomic status on academic performance of students in selected schools in Kwara State Nigeria", *International Journal of Academic Research in Business and Social Sciences*, , Vol. 2, No. 7

- Ojo, G. O (2014) “Determinants of Perceived Students’ Academic Performance in Vocational Education in Tertiary Institutions in Lagos State”, *International Journal of Arts and Humanities*, Vol. 3 (2); DOI: <http://dx.doi.org/10.4314/ijah.v3i2.14>
- Omeje, A. N and Abugu, S. O (2015), “The Impact of Scholarships on Students’ Academic Performance: A Case of Tertiary Institutions in Enugu State, Nigeria”, *Bulletin of Business and Economics*, 4(2), 93-104.
- Omoegun, M (2007), “Effect of parental socioeconomic status on parental care and social adjustment in the UBE programme in Lagos State: Implication for counseling”, *International Journal of Educational Research*. Vol. 3(2), pp.81 – 87
- Oni A. A (2007), “Socioeconomic status as predictor of deviant behaviours among Nigeria Secondary School Students”, *International Journal of Educational Research*, Vol. 3(2), pp. 225-236
- Rollins, B. C., & Thomas, D. L. (1979). Parental support, power, and control techniques in the socialization of children. In W. R. Burr, R. Hill, F. I. Nye, & I. L. Reiss (Eds.), *Contemporary theories about the family* (Vol. 1, pp. 317-364). New York: Macmillan
- Rouse, C. E and Barrow, L. (2006), “U.S. elementary and secondary schools: Equalizing opportunity or replicating the status quo?”, *The Future of Children*, 16(2), pp.99-123.
- Tandon, P. S., Zhou, C., Sallis, J. F., Cain, K. L., Frank, L. D and Saelens, B. E (2012), "Home environment relationships with children's physical activity, sedentary time, and screen time by socioeconomic status", *International Journal of Behavioral Nutrition and Physical Activity*, 9: 88. Doi: 10.1186/1479-5868-9-88
- Taussig, F. W (1920), “Principles of economics”, Newcastle: Cambridge Scholars Publishing.
- Trusty, J (1999), “Effects of eighth-grade parental involvement on late adolescents’ educational expectations”, *Journal of research and development in education*, 32(4), pp.224-233.

- Trusty, J. (2000), “High educational expectations and low achievement: Stability of educational goals across adolescence”, *Journal of Educational Research*, 93, pp.356- 366.
- Tsinidou, M., Gerogiannis, V and Fitsilis, P (2010), “Evaluation of the factors that determine quality in higher education: an empirical study”, *Quality Assurance in Education*, 18(3) pp.227-244.