PARENTAL TASK PERSISTENCE AS CORRELATE OF SCHOOL ADJUSTMENT AND ACADEMIC ACHIEVEMENT OF SENIOR SECONDARY SCHOOL STUDENTS IN PHYSIC IN ENUGU EDUCATION ZONE, ENUGU STATE

Friday Mamudu Adene (PhD), Edmund Eberechukwu Offordille (PhD), Dominic Solomon Ojonugwa (PhD) and Edwin Obinna Ugbo
Department of Educational Foundations, University of Nigeria, Nsukka.

Abstract
This study investigated parental task persistence as correlate of students’ school adjustment and academic achievement in secondary school in Enugu State. The study adopted co-relational research design and was guided by two research questions and two null hypotheses. Multi-stage sampling technique was adopted. The sample consists of 450 senior secondary school students drawn from 9 senior secondary school students in Enugu educational zone of Enugu State. Three instruments were used to collect data for the study – perceived parents Task Persistence Scale (PPTPS) and Student School Adjustment Scale (SSAS) - which were developed by the researchers and validated by three experts. The internal consistency reliability estimates are determined using Cronbach alpha method and an internal reliability coefficients of 0.86 and 0.84 were obtained for PPTPS and SSAS respectively. Data gathered for the study were analyzed using person “r” statistic which was used to answer the research questions and the two null hypotheses at 0.05 level of significance. Findings reveal significant relationships between parental task persistence and student’s school adjustment and their academic achievement in physic. Based on the findings the following recommendation among others was made that workshops should be organized in conjunction with Parents Teachers Association (PTA) in schools to enable parents be actively involved in their children’s learning at school as it will help the children to adjust properly in school as well as achieve better.

Keywords: Parental task persistence- school adjustment- academic achievement

Introduction
Considering the importance of physic in all human endeavours, the poor achievement of secondary school students in the subject from 2015 to 2018 has become a concerned issue to parents, stake holders and the government in general. Physics as a physical science is structural in
orientation and reduces matter to the atomic and molecular states as a building block of units which transposes to the complex structures that appeal to the consciousness of man. Hence, physics deals with the “what of what of things”. The energy changes of matter which is characteristic of the physics study is of utmost importance in addressing the problems of man’s energy need in the world. According to Alex (2013), physics is a driver of economic growth and from energy generation to novel medicine. It plays a vital role in driving innovation and development of new technologies. Alex further maintained that the sectors that will power the United Kingdom’s economy in the future are based on the innovative applications of physics and the skills of physics-trained personalities. This assertion, also applies to Nigeria as a developing nation in Africa. Mattazz, (2016), adduced that, physics as the bedrock of natural science, generates the fundamental knowledge necessary for the future technological advances that will continue to drive the economic engines of the world, leading to the technological infrastructure aimed at providing trained personnel needed to take advantage of the scientific advances and discoveries. According to Adeyemo (2011), physics is the study of natural phenomena in its fundamental state. In this study, physics can be seen as the study of the relationship that exists between matter and energy and their application to real life situations. Most of these importance of physics are built into the policy objectives of physics study at the senior secondary school level.

The policy objectives of physics as stipulated by West Africa Examinations Council (WAEC, 2017), include the following:- to enable the students acquire proper understanding of the basic principles and applications of physics, develop scientific skills and attitudes as pre-requisites for further scientific activities; recognize the usefulness, and limitations of scientific method to appreciate its applicability in other disciplines and in everyday life; develop scientific attitudes such as accuracy, precision, objectivity, integrity, initiative and inventiveness and to develop abilities, attitudes and skills that encourage efficient and safe practice. These objectives are the summary of the classroom activities in physics which is tailored towards the development of the scientific knowledge of the senior secondary school student. The parental involvement in the education of these students by prevailing persistently on the school task accomplishment by their wards might help in achieving success and in the realization of these objectives. Nonetheless, despite the world’s dependence on a developed physics knowledge for her energy source and astronomical advancement in technology, and the overwhelming importance of physics both in the scientific development and career accessibility comfort of science students in Africa, especially in Nigeria, the
achievement of the Senior Secondary School students in physics still remains poor. Statistically, the WAEC Chief Examiners report (2015) showed that in the June 2015 examination, out 658,393 students who sat for the May-June examination, a mean of 1.9 and a standard deviation of 09.90 were obtained. This reveals that only 52.11% had credit and above while 47.89 failed to meet the pass mark for the university admission. In 2016, out of 624, 638 candidates, a mean score of 30 with a standard deviation of 9.95 were achieved. This shows that only 38.81% credit passes were achieved which led to a failure rate of (61.19%). In 2017, a population of 63,924 took the WAEC May-June examination. Out of this population a mean score of 24 and a standard deviation 8.89 were obtained. This represents credit passes of 36.28% and a failure rate of 63.72%. Also in 2018, the Chief examiners report reveals that out of 502, 723 students who wrote the May-June examinations in physics, a raw mean score of 24 and standard deviation of 10.58 were achieved. This represents a credit pass of 28.38% required for university admission into various science courses in Nigeria, with a huge failure rate of 71.62%. Regrettably, Enugu Education Zone, which is the study area, is not an exception of this poor achievement in physics. These dwindling achievements of secondary school students in physics could have relationship with their parental task persistence as well as their adjustment in schools.

Academic achievement is the attainment of a standard of academic excellence (Umeano, 2010). It represents the performance outcomes that indicate the extent to which a person has accomplished specific goals that formed the main focus of activities in instructional environments, specifically in schools, college, and university (Ormroid, 2011). However Ormroid further maintains that the definition of academic achievement depends on its measuring indicator such as continuous assessment, test and examination. Fagg (2003) stressed that academic achievement describes actions related to work done in colleges and universities, in terms of achievement or results which is the major focus, especially on those works which involve studying and reasoning, practical and technical skills. In this study, academic achievement is the successes achieved in all the cognitive developmental activities in school. This academic achievement could be influenced by some environmental factors such as the learning environment which adversely could influence the adjustment of the students in schools (Igbinedion & Ovbiagele, 2012). A learning environment which is free from bullying, antagonism, rejection and extreme stress provides the students with a fertile ground for academic endeavour, which in turn could lead to better academic achievement. It is this prove of arriving at a balance between the need of individuals and
their satisfaction that is termed adjustment. Adjustment is a process of suitable responses to inner and outer stimuli (Kaushik, 2016). Adjustment can be seen as both a process and an outcome of the process in terms of the attainment realization of what an individual is set to achieve (Subhash & Sangita, 2017).

However, school adjustment refers to the process of adapting to the role of being a student and to various aspects of the school environment. Failure to adjust may invariably lead to mental health issues, confrontation with school authorities, fellow students and teachers. (Yengimolki, Kalantarkousheh & Malekitabar, 2015). They further maintained that this might lead to refusal to go to school and eventual drop out of school. School adjustment in this study refers to the process of accepting to be a student in a school environment and the preparedness to abide by the school rules and regulations which are tailored toward the attainment of academic success and the overall development of the individual at the end of the school period. Raju and Rahamtula, 2007 cited in Kaushik, (2016) stressed that poor school adjustment lead to low academic achievement, behavioural problems, irrelevant educational aspirations and even school dropout. Raju and Rahamtula further asserted successful school adjustment and high academic achievement is influenced by many factors which include parental task persistence.

Task persistence is a demonstration of the determination, resolution, endurance, diligence, tenacity, doggedness, indefatigability and tactlessness in the pursuit and accomplishment of tasks (Wool Folk, 2011). Also according to Mc Cracken and Samuel (2007) task persistence is all about maintaining activity despite fluctuations of pain intensity.

Parents’ task persistence is the monitoring of school activities at home and coordinating the efforts of the learners with that of the teachers to encourage acceptable classroom behavior and ensure that the child completes its school work (Deslandes & Bertrand, 2005). Parents’ task persistence is an expression of parental involvement in the education of their children. Other evidence of parents’ task persistence is in their involvement to ensure that secondary school students complete their academic tasks like take home assignment, studying at home and prevailing on the students to adjust effectively and efficiently to the school environment in order to enhance academic success. The level at which a student adjust and perform in school depends sometimes on the degree or level of parental task persistence. High parental task persistence involves parents who consistently encourage and monitor their children until any academic task is done (Hill & Craft, 2003). On the other hand low parental task persistence involves parents who show permissive attitudes towards their children’s academic work at home.
Research have shown that students perform better in school if their fathers as well as their mothers are involved, regardless of whether the father lives with the students or not (Delgado-Gaitan, 2001). Parents’ task persistence in this study is the consistent involvement of parents in the education of their children by ensuring that their children study at home complete their take home assignments and adjust well at school. A recent meta-analysis study showed that parental task persistence in school life was more strongly associated with highly academic performance for students’ completion of their home work (Hill & Tyson, 2009). This is in line with the assertions made by Kirkhaug et al. (2013); Destorges and Abonchaar (2003) as they maintained that parental task persistence in students’ education is a major predictor of school success and exerts a powerful impact on school attainment and adjustment. Anderson & Bergman (2011) found that parental task persistence is of particular interest and importance since it has been shown to be predictive of many academic and employment outcomes, as well as adult educational attainment, income, and occupational level. Similarly, the relationship between parental task persistence and academic achievement has been found to be positive (Boe, May, & Boruch, 2002; Petrill Deater-Deckard, Thompson & Dethorne, 2005, McClelland, Acocck, Piccin, Rhea, & Stallings, 2013). The result of Rory (2011) revealed that students who received effort based reinforcement cues prior to task engagement showed greater levels of perseverance or persistence than students who received the ability-based reinforcement cues. Hence, when students perceive the vigor with which their parents attend to matters concerning their academic achievement in physics, they tend to persevere in their physics study which enhances their achievement in physics. However, little information is known regarding the relationship between parental task persistence of parents in Enugu education zone and students’ school adjustment and academic achievement in physics. It seems parents in the study area are not aware that their task persistence on their children in school could have relationship with their school adjustment as well as their academic achievement in school subjects, especially, in physics as a subject. It is on this note that the researchers therefore, investigated the relationship between parental task persistence and school adjustment and academic achievement of senior secondary school students in physics. The problem of this study, therefore, put in question form is: what is the relationship between parents’ task persistence and school adjustment and academic achievement of secondary school students in physics?
Purpose of the Study
The purpose of the study was to investigate the relationship between parental task persistence, school adjustment and academic achievement of senior secondary school students in physics. Specifically, the study:

(1) ascertained the relationship between parental task persistence and school adjustment of senior secondary school students.

(2) determined the relationship between parental task persistence and achievement of senior secondary school students in physics.

Research Questions

(1) What is the relationship between parental task persistence and school adjustment of senior secondary school students?

(2) What is the relationship between parental task persistence and academic achievement of senior secondary school students in physics?

Hypothesis

H01: There is no significant relationship between parental task persistence and school adjustment of senior secondary school students.

H011: There is no significant relationship between parental task persistence and academic achievement of senior school students in physics.

Method
The study adopted correlation research design. There are 31 public senior secondary schools in the 13 local government areas that made up Enugu education zone. The population comprise of 2,580 SSII science students (Planning, Research and Statistics (PRS), Ministry of Education, MOE, Enugu, 2017). This population is distributed among the three LGAs as follows: Enugu North Local Government Area has 1152 SSII students; Enugu East has 997 SSII students while Isiuzo has 431 SSII students. The sample is made up of 450 SSII physics students. Multi-stage sampling procedure was adopted in drawing the sample for the study.

First, out of the 31 Senior Secondary Schools in the zone, the researchers randomly sampled 9 senior secondary schools. Second, the SS11 classes were stratified by class streams and selected the science (physics) classes. Thirdly, one intact science class with the highest number (50) of physics students was selected. This gave rise to a total of 450 physics students for the study. Three instruments were used for data collection. These include; the students’ termly and annual results in the zone; the Perceived Parental
Task Persistence Scale (PPTPS) and Students’ School Adjustment Scale (SSAS).

The PPTPS was made up of 20 items adapted from the standard 40 item task persistence in physics scale develop by Dubi & Lufi (2014), and the SSAS which contains 20 items was developed by the researchers through review of literature. The items on the scales were constructed, based on four points rating scale of strongly Agree (SA=4), Agree (A = 3), Disagree (D = 2) and strongly disagree (SD=1). The instruments were validated by three experts, one from measurement and evaluation and two from educational psychology, all in the faculty of education, University of Nigeria, Nsukka. To determine the internal consistency of the instruments, the instruments were administered to 20 physic students outside the area of study, who were not part of the subjects sampled for the study. The data collected were subjected to Crobach Alpha method and an internal reliability coefficient of 0.86 and 0.84 were obtained for PPTPS and SSAS respectively, which were high enough for the instruments to be considered reliable. The data collected were analyzed using Pearson “r” statistics. The basis for the decision for the research question’ conclusions include the following: 0.00 – 0.20: Very low relationship, 0.21 – 0.40: low relationship 0.41 – 0.60: Moderate relationship, 0.61 – 0.80: high relationship and 0.81 – 1.0: very high relationship. A mean score of SSII students’ termly and annual results was used to elicit information on the academic achievement of the students with 50% mean score as a bench mark achievement.

Result:

Table 1: Correlation coefficient between parental task persistence and school adjustment of senior secondary school students.

<table>
<thead>
<tr>
<th>N</th>
<th>R</th>
<th>P</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>450</td>
<td>0.752</td>
<td>0.00</td>
<td>High positive relationship</td>
</tr>
</tbody>
</table>

Result in Table 1 shows the correlation coefficient between parental task persistence and school adjustment of senior secondary students. The result of the analysis shows a correlation coefficient of 0.752 for the relationship between parental task persistence and school adjustment of students. This shows that there is high positive relationship between parental task persistence and school adjustment of students. Table 1 also shows that there is a significant positive relationship between parental task persistence and school adjustment of senior secondary school students in physics, r = .752, p = 0.00. Thus, the higher the task persistence of parents, the higher the students’ school adjustment.
Table 2: Correlation coefficient between parental task persistence and academic achievement of senior secondary school students in physics.

<table>
<thead>
<tr>
<th>N</th>
<th>R</th>
<th>P</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>450</td>
<td>0.880</td>
<td>0.00</td>
<td>High positive relationship</td>
</tr>
</tbody>
</table>

Result in Table 2 shows the correlation coefficient between parental task persistence and academic achievement of senior secondary school students in physics. The result of the analysis shows a correlation coefficient of 0.880 for the relationship between parental task persistence and academic achievement of students. This shows that there is high positive relationship between parental task persistence and academic achievement of students in physics. Table 1 also shows that there is a significant positive relationship between parental task persistence and academic achievement of senior secondary school students in physics, $r = 0.880$, $p = 0.00$. Thus, the higher the task persistence of parents, the higher the students’ academic achievement.

Discussion of Findings

It has been shown in this study that there exists a very high positive relationship between parental task persistence and school adjustment of senior secondary school students in Enugu Education zone, Enugu State. This implies that as parents tend to persist highly in the execution of their tasks; their children (students) tend to adjust better in their schools. This is because persistence in an academic task aligns with a sense of responsibility and seriousness which will develop in a person the idea that life is not just a bed of roses. Hence one has to adjust in order to cope with an existing situation or any academic environment. The finding of this study is in line with the study of Adeyemi, Adediran and Adewole (2018), as their findings maintained that a high level of parental involvement predicted positive school adjustment. This finding according to Adeyemi et al (2018) is in consonance with the views of McFadyen – Ketchum, Bates, Dodge & Pettit (1996) who believed that hostile, non-affectionate and coercive parenting indicated by yelling, insults, meanness, swearing and physical punishment were found to be related to high level of behaviour problems such as aggression and these affect school adjustment of students negatively.

This study also revealed that high positive relationship exists between parental task persistence and academic achievement of senior secondary school students in physics. The finding of this study is also in consonance with the findings of Boe, May, & Boruch, 2002; Deater-Deckard, Petrill, Thompson & Dethorne, 2005, McClelland, Acock Piccin, Rhea, & Stallings,
This implies that the more persistent parents become in the academic task of their children in secondary schools, the higher their academic achievements especially, in physics as a subject.

**Conclusion**

In conclusion, the study expresses the fact that parental task persistence and supportiveness of their students in school predict high school adjustment of the students. Also parental task persistence as perceived by the students leads to high academic achievement of the senior secondary school students in physics. This implies that as parents ensure that their students finish their task on home assignments, do their preparatory studies at home, attend school early, and tend to positively influence the academic achievement of these students in their school work.

**Recommendations**

The following recommendations were adduced based on the findings of the study.

1. Parents should be actively involved in their children’s learning at school. This will help these children to adjust effectively in school.
2. Parents should make home environment conducive and should insist that the students persist in discharging their academic tasks at home. This will enhance their success and academic achievement in physics and other abstract subjects.

**Reference**


Alex, C. (2013). Importance of physics to economic development. Institute of Physics 73/74, USA.

University, Philadelphia. Retrieved online from Educational Resource Information Center ERIC (ED478493)


