Influence Of Non-Cognitive Skills On Students’ Academic Achievement In Senior Secondary Schools In Imo State

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Abstract
The study examined the influence of non-cognitive skills on academic achievement of senior secondary school students in Imo State. Four research questions and hypotheses were used for the study. The research questions addressed resilience, self-control, perseverance and self-perception as the non-cognitive skills that influence academic achievement in the senior secondary schools in Imo State. The study adopted descriptive survey research design with 892 senior secondary school 2 students as the sample size of the study selected from the three (3) Local Government areas of Imo State. A validated survey instrument titled “Influence of Non-Cognitive Skills on Students’ Academic Achievement” with reliability coefficient of 0.89 was used for data collection using test-retest method. Data collections were through the two major sources – primary and secondary sources, streamlined to meet the information requirements of the study. Descriptive statistics of mean and standard deviation and inferential statistic of One-way Analysis of Variance were employed in analyzing the collected data. The study found that resilience, self-control, perseverance and self-perception showed no significant difference at p<0.05. Thus, it was concluded that resilience, self-control, perseverance and self-perception influenced academic achievement of Senior Secondary School 2 students in Imo State. It was recommended, among others, that parents, teachers, and all stakeholders should create suitable learning environments to develop in students the non-cognitive skills of resilience, self-control, perseverance, and self-perception to enhance not only their academic achievement but success in all their endeavours.

Keywords: non-cognitive skills, students, academic achievement, resilience, self-control, perseverance, self-perception.

INTRODUCTION
Education, in its broadest sense, is a process designed to inculcate knowledge, skills and attitudes necessary to enable individuals to cope effectively with their environment. Its primary purpose is to foster and promote the fullest individual self-realization for all people. It is indispensable to normal living, without education the individual would be unqualified for group life (Adeagbe, 2004). According to Aremu (2000), education is the process of developing the capacities and potentials of the individuals as to prepare that individual to be successful in a specific society or culture. Notably, it is often said to be the powerful tool for developing intellectual abilities, shaping cultural attributes, acquiring knowledge and skills as well as a favourable tool to move a nation towards developing its scientific and technological culture.

Academic success in recent time has been attributed to many factors which make the student succeed against prevailing odds and personal challenges. Many people have attributed academic success as largely dependent on students’ ability to overcome non-cognitive skills that would have put them far behind their peers in a particular examination or test. The mass failure of students in external/internal examinations such as Senior Secondary Certificate Examination (SSCE) and University Tertiary Matriculation

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Examination (UTME) across the country has also raised eye-brows on the impact of non-cognitive skills on students’ achievements.

According to Duncan and Dunifon (2012), non-cognitive skills are clusters of productive personality traits that characterize one’s relationships in a milieu such as resilience, self-control, self-perceptions, perseverance, motivation, meta-cognitive strategies, social competencies and creativity. Resilience, according to Conner (2012), is the capacity to absorb high levels of change while displaying minimal dysfunctional behaviour. Bryant (2015) defined resilience as the successful outcome of a process which is invoked by change. He further explained that when a change enters into a person’s life, the individual’s traits (e.g., optimism) and skills (e.g., time management) interact with environmental and situational factors (e.g., the necessity to relocate quickly and efficiently). This interaction produces behaviours that increase the likelihood of a successful adaptation to change (Bryant, 2015). He further explained that resilience is illustrated by the maintenance or improvement of social, occupational, and/or personal performance following some change in circumstances. Wang et al., (2014) referred to academic resilience as an increased likelihood of (academic) success despite environmental adversities. Resilient students are described by Alva (2011) as those who maintain high motivational achievement and performance even when faced with stressful events and conditions that place them at risk of poor performance and by Waxman et al. (2013) as those who succeed at school despite the presence of adverse conditions.

Self-control is the ability to restrain or inhibit a dominant response (i.e., thoughts, feelings, or behaviour), allowing a person to act in a different way (Baumeister et al.,2007). Typically, reported studies showed that these self-control practice interventions improved self-control, as indicated by measures of inhibitory control or everyday self-regulation (e.g., healthier eating behaviour, decreased impulse spending, and reduced inclination for intimate partner violence (Cranwell et al.,2014; Muraven, 2010a, 2010b; Oaten & Cheng, 2006a, 2006b). Good self-control has been observed to have many positive outcomes related to health, success, wellbeing, and crime avoidance (Quinn & Tsukayama, 2012; Zettler, 2011). Policy-makers all over the world have considered large-scale programmes aimed at improving self-control with the hope of improving success, health, and wealth (Moffitt et al., 2011). Self-control among students makes for discipline which enhances academic achievement.

Perseverance is willingly pursuing a goal despite obstacles, difficulties and disappointments (Peterson & Seligman, 2004). Perseverance requires one to work hard even in the existence of difficulties and show efforts to reach a goal despite all the failures one faces. Dweck and Leggett (2012) observed that some children with similar cognitive levels show perseverance to deal with difficult tasks while others avoid the tasks. Further, Dweck (2008) noted that some students feel desperate and prefer to give up in the face of failure. Perseverance is the non-cognitive trait that is associated with the Grit Scale, as well as demonstrated to be necessary for success in reaching goals. Students who persevere at tasks perform better academically than those who do not persevere. It is believed that even very intelligent people who do not persevere fail to accomplish tasks and thus do not succeed. Perseverance is unrelated to intelligence (IQ). It is defined as being passionate about your work and being resilient in the face of setbacks (Mangan, 2012). It promotes success and enhances academic achievement.

According to Shavelson et al., (2011), academic self-perception is the awareness and perception about oneself in achievement situations. Positive self-perceptions about one’s own academic capabilities form a significant part in adolescent students and their adjustment in school. Bong et al., (2003) defined academic self-perception as students’ overall feelings of doing well or poorly in a given subject area. The ability to think about one’s thinking allows the adolescent to develop concepts about the internal workings of the self-system. Self-perception can be positive or negative. Negative self-perception breeds low self-confidence leading to poor academic achievement. Positive self-perception on the other hand builds high self-confidence and attendant high academic achievement.

Various studies such as those conducted by Fullana (2008), Monterol (2010) have sought to understand the factors which account for low achievement in academic activities of students in schools. Studies seeking to identify what determines academic failure frequently appear as response to critical situations. Non-cognitive ability is one important determinant of academic achievement (Ackerman & Heggestad, 2007). But Chamorro-Premuzie and Furnham, (2006) argued that ability factors alone cannot sufficiently
account for individual differences in academic success. Therefore, this study examined the extent of influence of non-cognitive skills on students’ academic achievement in senior secondary schools in Imo State with a view to recommending strategies that will enhance the academic achievement of students.

**Statement of the problem**

The success of students in school with respect to academic performance is a function of factors linked to the school, teachers, students, parents and the students’ efforts which are generally said to be internal and external factors. However concise, it is pertinent to note that knowledge of the factors that influence academic success has important implications for learning and education generally. Many educators for example, are interested in knowing beforehand who will perform well, and who will perform poorly, in academic programmes. The effect of content areas of individual subjects on the academic achievement of learners is an issue that seems to be given little or no attention by researchers. Various studies conducted, have sought to understand the factors which account for low achievement in academic activities of students in schools. Studies seeking to identify what determines academic failure frequently appear as response to critical situations. Chamorro-P and Furnham (2003) argued that ability factors alone cannot sufficiently account for individual differences in academic success. Therefore, researchers have sought to identify other predictors of academic success among senior secondary school students. The present study therefore examined the extent of influence of non-cognitive skills on students’ academic achievement in senior secondary schools in Imo State with a view to recommend strategies that will enhance the academic achievement of students.

**Purpose of the Study**

The purpose of this study was to examine the influence of non-cognitive skills on academic achievement of senior secondary school students in Imo State. The specific objectives are to:

1. Determine the influence of resilience on academic achievement of senior secondary school students in Imo State.
2. Determine the influence of self-control on academic achievement of senior secondary school students in Imo State.
3. Ascertain the influence of perseverance on academic achievement of senior secondary school students in Imo State.
4. Determine the influence of self-perception on academic achievement of senior secondary school students in Imo State.

**Research Questions**

Based on the purpose of this research, the following research questions were formulated and they guided the study:

1. To what extent does resilience influence academic achievement of senior secondary school students in Imo State?
2. To what extent does self-control influence academic achievement of senior secondary school students in Imo State?
3. To what extent does perseverance influence academic achievement of senior secondary school students in Imo State?
4. To what extent does self-perception influence academic achievement of senior secondary school students in Imo State?

**Hypotheses**

The following are the hypotheses drawn from the research questions:

1. There is no significant influence of resilience on academic achievement of senior secondary school students in Imo State.
2. There is no significant influence of self-control on academic achievement of senior secondary school students in Imo State.
3. There is no significant influence of perseverance on academic achievement of senior secondary school students in Imo State.
4. There is no significant influence of self-perception on academic achievement of senior secondary school students in Imo State.
METHODOLOGY
This study was conducted in public senior secondary schools in Ikeduru, Isiala Mbano, and Owerri West Local Government Areas of Imo State. The Local Government Areas chosen are part of the 27 Local Government Areas of Imo State which lie in the transition zone of the Niger Delta Region. The study adopted descriptive survey research design. The population of the study was 4,222 senior secondary school two (SS2) students in the chosen three Local Government Areas of Imo State. The sample size of the study was 892 of senior secondary school two (SS2) students selected from 12 Government secondary schools in 3 Local Government Areas of Imo State. Instrument for data collection was a structured questionnaire with a reliability coefficient of 0.86. The data obtained was analysed using mean, standard deviation and One-way Analysis of Variance (ANOVA). In answering the research questions, decisions were based on the following classifications: Very High Extent: 3.50 – 4.00; High Extent: 2.50 – 3.49; Low Extent: 1.50 – 2.49; and Very Low Extent: 1.00 – 1.49.

RESULTS AND DISCUSSIONS
Research Question 1: To what extent does resilience influence academic achievement of senior secondary school students in Imo State?

Table 4.1: Descriptive Analysis of Response on Influence of Resilience on Students’ Academic Achievement

<table>
<thead>
<tr>
<th>S/No.</th>
<th>Statement</th>
<th>Owerri West</th>
<th>Isiala Mbano</th>
<th>Ikeduru</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>It is very hard for me to control my emotions in school when I am facing family problems</td>
<td>3.17</td>
<td>3.22</td>
<td>3.23</td>
<td>Mean SD</td>
</tr>
<tr>
<td>2</td>
<td>I am very good at maintaining a calm exterior even if I am upset in school</td>
<td>3.41</td>
<td>3.43</td>
<td>3.28</td>
<td>Mean SD</td>
</tr>
<tr>
<td>3</td>
<td>I don’t allow any family problems to affect my academic in school</td>
<td>3.10</td>
<td>3.11</td>
<td>3.14</td>
<td>Mean SD</td>
</tr>
<tr>
<td>4</td>
<td>I concentrate well in school when I am faced with risk of not paying my school fees</td>
<td>3.41</td>
<td>3.39</td>
<td>3.23</td>
<td>Mean SD</td>
</tr>
<tr>
<td></td>
<td><strong>Grand Mean (X)</strong></td>
<td><strong>3.27</strong></td>
<td><strong>3.29</strong></td>
<td><strong>3.22</strong></td>
<td>High Extent</td>
</tr>
</tbody>
</table>

Resilience influences academic achievement to a High Extent: 2.50 ≤ X ≤ 3.49

Table 4.1 shows that Senior Secondary Two (SS2) students of Owerri, Isiala Mbano, and Ikeduru Local Government Areas of Imo State have grand means of 3.27, 3.29 and 3.22 respectively indicating high extent influence of resilience on students’ academic achievement. That is, in public senior secondary schools in Imo State of Nigeria, resilience influences students’ academic achievement to a high extent: 2.50 ≤ X ≤ 3.49.
**Research Question 2:** To what extent does self-control influence academic achievement of senior secondary school students in Imo State?

**Table 4.2: Descriptive Analysis of Response on Influence of Self-control on Students’ Academic Achievement**

<table>
<thead>
<tr>
<th>S/No.</th>
<th>Statement</th>
<th>Owerri West Mean</th>
<th>Owerri West SD</th>
<th>Isiala Mbano Mean</th>
<th>Isiala Mbano SD</th>
<th>Ikeduru Mean</th>
<th>Ikeduru SD</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I hardly get distracted from academic work easily</td>
<td>3.20</td>
<td>0.75</td>
<td>3.23</td>
<td>0.76</td>
<td>3.25</td>
<td>0.74</td>
<td>High Extent</td>
</tr>
<tr>
<td>2</td>
<td>I do things that feel good towards my studies in the moment but regret later on</td>
<td>3.11</td>
<td>0.54</td>
<td>3.10</td>
<td>0.54</td>
<td>3.12</td>
<td>0.54</td>
<td>High Extent</td>
</tr>
<tr>
<td>3</td>
<td>Sometimes I don’t get my academic work done due to pleasure and fun.</td>
<td>2.70</td>
<td>0.61</td>
<td>2.90</td>
<td>0.60</td>
<td>2.80</td>
<td>0.59</td>
<td>High Extent</td>
</tr>
<tr>
<td>4</td>
<td>I refuse things that are bad for me even if they are fun</td>
<td>2.98</td>
<td>0.71</td>
<td>2.89</td>
<td>0.70</td>
<td>2.92</td>
<td>0.69</td>
<td>High Extent</td>
</tr>
<tr>
<td></td>
<td><strong>Grand Mean ((\bar{x}))</strong></td>
<td><strong>3.00</strong></td>
<td><strong>3.03</strong></td>
<td><strong>3.02</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Resilience influences academic achievement to a High Extent: 2.50 \(\leq \bar{x} \leq 3.49\)

The results of table 4.2 show that Senior Secondary Two (SS2) students of Owerri, Isiala Mbano, and Ikeduru Local Government Areas of Imo State have grand means of 3.00, 3.03 and 3.02 respectively indicating high extent influence of resilience on students’ academic achievement. That is, in public senior secondary schools in Imo State of Nigeria, resilience influences students’ academic achievement to a high extent: 2.50 \(\leq \bar{x} \leq 3.49\).

**Research Question 3**

To what extent does perseverance influence academic achievement of senior secondary school students in Imo state?

**Table 4.3: Descriptive Analysis of Response on Influence of Perseverance on Students’ Academic Achievement**

<table>
<thead>
<tr>
<th>S/No.</th>
<th>Statement</th>
<th>Owerri West Mean</th>
<th>Owerri West SD</th>
<th>Isiala Mbano Mean</th>
<th>Isiala Mbano SD</th>
<th>Ikeduru Mean</th>
<th>Ikeduru SD</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>When confronted with academic problems, I give up easily</td>
<td>3.11</td>
<td>0.83</td>
<td>3.09</td>
<td>0.85</td>
<td>3.11</td>
<td>0.81</td>
<td>High Extent</td>
</tr>
<tr>
<td>2</td>
<td>I continue working on academic tasks until everything is perfect</td>
<td>2.92</td>
<td>0.95</td>
<td>2.90</td>
<td>0.94</td>
<td>2.92</td>
<td>0.92</td>
<td>High Extent</td>
</tr>
<tr>
<td>3</td>
<td>When confronted with academic problems I do more than what is expected of me.</td>
<td>3.20</td>
<td>0.89</td>
<td>3.19</td>
<td>0.87</td>
<td>3.22</td>
<td>0.85</td>
<td>High Extent</td>
</tr>
<tr>
<td>4</td>
<td>I put off difficult problems</td>
<td>1.99</td>
<td>0.74</td>
<td>1.98</td>
<td>0.77</td>
<td>1.95</td>
<td>0.76</td>
<td>Low Extent</td>
</tr>
<tr>
<td></td>
<td><strong>Grand Mean ((\bar{x}))</strong></td>
<td><strong>2.81</strong></td>
<td><strong>2.79</strong></td>
<td><strong>2.80</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Resilience influences academic achievement to a High Extent: 2.50 \(\leq \bar{x} \leq 3.49\)
Table 4.3 shows that Senior Secondary Two (SS2) students of Owerri, Isiala Mbano, and Ikeduru Local Government Areas of Imo State have grand means of 2.81, 2.79 and 2.80 respectively indicating high extent influence of resilience on students’ academic achievement. That is, in public senior secondary schools in Imo State of Nigeria, resilience influences students’ academic achievement to a high extent: $2.50 \leq \bar{x} \leq 3.49$.

**Research Question 4**
To what extent does self-perception influence academic achievement of senior secondary school students in Imo State?

**Table 4.4: Descriptive Analysis of Response on Influence of Self-perception on Students’ Academic Achievement**

<table>
<thead>
<tr>
<th>S/No.</th>
<th>Statement</th>
<th>Owerri West</th>
<th>Isiala Mbano</th>
<th>Ikeduru</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>1</td>
<td>I work very long time to complete my academic task</td>
<td>2.93</td>
<td>0.54</td>
<td>2.89</td>
<td>0.45</td>
</tr>
<tr>
<td>2</td>
<td>I finish whatever i begin</td>
<td>3.01</td>
<td>0.63</td>
<td>3.00</td>
<td>0.73</td>
</tr>
<tr>
<td>3</td>
<td>I keep studying in school when others stop to take a break</td>
<td>2.91</td>
<td>0.51</td>
<td>2.80</td>
<td>0.59</td>
</tr>
<tr>
<td>4</td>
<td>I have difficulty maintaining my focus on academic task that take a very long time to complete</td>
<td>2.00</td>
<td>0.63</td>
<td>2.01</td>
<td>0.71</td>
</tr>
<tr>
<td></td>
<td><strong>Grand Mean (\bar{x})</strong></td>
<td><strong>2.71</strong></td>
<td><strong>2.68</strong></td>
<td><strong>2.79</strong></td>
<td></td>
</tr>
</tbody>
</table>

Resilience influences academic achievement to a High Extent: $2.50 \leq \bar{x} \leq 3.49$

The results of table 4.4 show that Senior Secondary Two (SS2) students of Owerri, Isiala Mbano and Ikeduru Local Government Areas of Imo State have grand means of 2.71, 2.68 and 2.79 respectively indicating high extent influence of resilience on students’ academic achievement. That is, in public senior secondary schools in Imo State of Nigeria, resilience influences students’ academic achievement to a high extent: $2.50 \leq \bar{x} \leq 3.49$.

**Hypothesis 1**
There is no significant influence of resilience on academic achievement of senior secondary school students in Imo State.

**Table 4.5: ANOVA on Influence of Resilience on Students’ Academic Achievement**

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>.071</td>
<td>2</td>
<td>.035</td>
<td>.099</td>
<td>.546</td>
</tr>
<tr>
<td>Within Groups</td>
<td>319.606</td>
<td>889</td>
<td>.360</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>319.677</td>
<td>891</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The mean difference is not significant at 0.05: [$F(2, 889) = 0.099; P = .546 > 0.05$]
Table 4.5 shows the sum of squares of 0.071, with 2 degrees of freedom and a mean square of 0.035 for between groups. Within groups has the sum of squares of 319.606, degrees of freedom, 889 and a mean square of 0.360, while the total has 319.677 sum of squares and degrees of freedom of 891. The computed F is 0.099 which is statistically not significant at 0.05 [F(2, 889) = 0.099; P = .546 > 0.05]. This means that there is no significant difference in the mean responses of the three groups of students from Owerri West, Isiala Mbano and Ikeduru Local Government Areas of Imo State regarding the influence of resilience on the academic achievement of senior secondary school 2 students in Imo State. In other words, the students of the three Local Government Areas are in consensus that resilience influences students’ academic achievement to a high extent.

**Hypothesis 2**

There is no significant influence of self-control on academic achievement of senior secondary school students in Imo State.

### Table 4.6: ANOVA on Influence of Self-Control on Students’ Academic Achievement

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>0.443</td>
<td>2</td>
<td>0.222</td>
<td>0.396</td>
<td>0.673</td>
</tr>
<tr>
<td>Within Groups</td>
<td>497.829</td>
<td>889</td>
<td>0.560</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td><strong>498.272</strong></td>
<td><strong>891</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The mean difference is not significant at 0.05: [F(2, 889) = 0.396; P = .673 > 0.05]

The results of table 4.6 show the sum of squares of 0.443, with 2 degrees of freedom and a mean square of 0.222 for between groups. Within groups has the sum of squares of 497.829, degrees of freedom of 889 and a mean square of 0.560, while the total has 498.272 sum of squares and degrees of freedom 891. The computed F is 0.396 which is statistically not significant at 0.05 [F(2, 889) = .396; P = .673 > 0.05]. This means that there is no significant difference in the mean responses of the three groups of students from Owerri West, Isiala Mbano and Ikeduru Local Government Areas of Imo State that self-control influences students’ academic achievement. In other words, the students of the three Local Government Areas agree that self-control influences students’ academic achievement to a high extent.

**Hypothesis 3**

There is no significant influence of perseverance on academic achievement of senior secondary school students in Imo State.

### Table 4.7: ANOVA on Influence of Perseverance on Students’ Academic Achievement

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>.096</td>
<td>2</td>
<td>.048</td>
<td>.069</td>
<td>.633</td>
</tr>
<tr>
<td>Within Groups</td>
<td>611.613</td>
<td>889</td>
<td>.688</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td><strong>611.709</strong></td>
<td><strong>891</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The mean difference is not significant at 0.05: [F(2, 889) = .069; P = .633 > 0.05]

Table 4.7 shows that the sum of squares of 0.096, with 2 degree of freedom and a mean square of 0.048 for between groups. Within groups has the sum of squares of 611.613, degrees of freedom of 889 and a mean square of 0.688, while the total has 611.709 sum of squares and degrees of freedom 891. The computed F is 0.069 which is statistically not significant at 0.05 [F(2, 889) = .069; P = .633 > 0.05]. This means that there is no significant difference in the mean responses of the three groups of students from Owerri West, Isiala Mbano, and Ikeduru Local Government Areas of Imo State regarding the influence of perseverance on the academic achievement of senior secondary school 2 students in Imo State. In other words, the students of the three Local Government Areas are in consensus that perseverance influences students’ academic achievement to a high extent.
Hypothesis 4
There is no significant influence of self-perception on academic achievement of senior secondary school students in Imo state.

Table 4.8: ANOVA on Influence of Self-Perception on Students’ Academic Achievement

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>.028</td>
<td>2</td>
<td>.014</td>
<td>.048</td>
<td>.753</td>
</tr>
<tr>
<td>Within Groups</td>
<td>255.291</td>
<td>889</td>
<td>.287</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>255.318</td>
<td>891</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The mean difference is not significant at 0.05: [F(2,889) = .048; P = .753 > 0.05]

The results of table 4.8 show the sum of squares of 0.028, with 2 degrees of freedom and a mean square of 0.048 for between groups. Within groups has the sum of squares of 255.291, degrees of freedom, 889 and a mean square of 0.287, while the total has 255.318 sum of squares and degree of freedom 891. The computed F is 0.048 which is statistically not significant at 0.05 [F(2,889) = .048; P = .753 > 0.05]. This means that there was no significant difference in the mean responses of the three groups of students from Owerri West, Isiala Mbano, and Ikeduru Local Government Areas of Imo State regarding the influence of self-perception on the academic achievement of senior secondary school 2 students in Imo State. In other words, the students of the three Local Government Areas are in consensus that self-perception influences students’ academic achievement to a high extent.

Summary of Findings
1. Resilience, a non-cognitive skill, influences students’ academic achievement to a high extent, in public senior secondary schools in Imo State of Nigeria.
2. Self-control, a non-cognitive skill, influences students’ academic achievement to a high extent, in public senior secondary schools in Imo State of Nigeria.
3. Perseverance, a non-cognitive skill, influences students’ academic achievement to a high extent, in public senior secondary schools in Imo State of Nigeria.
4. Self-perception, a non-cognitive skill, influences students’ academic achievement to a high extent, in public senior secondary schools in Imo State of Nigeria.

DISCUSSION OF FINDINGS
The study found that resilience as a non-cognitive skill, influences students’ academic achievement to a high extent, in public senior secondary schools in Imo State of Nigeria. This finding is in consonance with those of many empirical studies. Scales et al. (2003), in their longitudinal study found that higher levels of resiliency traits are strongly correlated with higher grade point averages (GPAs) among middle and high school students. Also, Hanson and Austin (2003) conducted a longitudinal study of students in California and found that nearly every measure of resilience was positively related to concurrent test scores. The highest increases in test scores occurred in schools where the students reported high levels of resilience. However, Sarwar et al. (2010) found that there is no relationship between resilience and students’ academic achievement.

Also the study found that self-control, a non-cognitive skill, influences students’ academic achievement to a high extent, in public senior secondary schools in Imo State of Nigeria. In his support of this finding, Myers (2010) found that students with internal self-control are more successful in school and work than those without. According to Myers (2010) people with internal self-control have the ability to suppress their immediate gratification and aim for more lasting desired outcomes. Further, Converse, Piccone and Tocci (2013) opined that childhood self-control predicted adolescent behaviours which directly and indirectly predicted educational attainment, income and job satisfaction in adulthood.

Perseverance, a non-cognitive skill, was found in this study to influences students’ academic achievement to a high extent, in public senior secondary schools in Imo State of Nigeria. This finding is supported by Hasselhorn and Gold (2006) who found that learners who give up early and are not willing to go to the
limits may not gain new competencies, while Vygotsky (1998) opined that learning occurs when students persevere on assignments or problems that require advanced knowledge and that because learning is a process that challenges students and sometimes hurts them, perseverance is vital tool. Hasselhorn and Gold (2006) also opined that personal experience has shown that persistence and engagement are vital student virtues for performing well in schools. Also De Vera et al. (2015) declared that non-cognitive skill like perseverance is related to better performance and greater success in both the academia and in the real-world of work. The result of this study is further supported by the assertion of Ericsson (2006), Duckworth et al., (2011) when they declared that grittier individuals are more persistent and diligent, not discouraged by setbacks or failure, more focused on projects or goals, and are more likely to complete tasks, while less gritty individuals who are not as persistent or diligent, are easily distracted by new ideas or projects, unable to set long-term goals, and lack motivation or focus for long-term projects.

This study finally found that self-perception, a non-cognitive skill, influences students’ academic achievement to a high extent, in public senior secondary schools in Imo State of Nigeria. This finding is supported by Marsh and Seeshing (1997) who emphasised that the perceptions, characteristics or attributes that an individual assigns to him describe the extent of the success he can attain both at school and at work. According to Marsh and Seeshing (1997), self-perception is the set of knowledge and attitudes that we have about ourselves which has the tendency of protecting our emotional well-being. Heath and Glen (2005) proposed a “self-protection” hypothesis, whereby individuals may hold positively distorted self-perceptions of competence to shield themselves from the emotional consequences of failure. In this case, a mismatch between self-perceived and demonstrated academic competence could be a signal to teachers and others of a need to intervene, a sign of distress. Glen, Heath, Karagiannakis and Hoida (2004) suggested that since academic self-perception demonstrates an important role in guiding students’ enterprise towards their academic effort, parents and teachers should guide students’ in the development of their self-perception. Self-perceptions is the set of reference points that the individuals have about themselves; the set of characteristics, attributes, qualities and deficiencies, capacities, limits, values and relationships that the individuals know to be descriptive of them and which propel them to work hard and succeed or not to work hard and fail (Marsh & Seeshing, 1997).

CONCLUSION

This study has revealed that non-cognitive skills, defined by its elements (resilience, self-control, perseverance and self-perception), influence students’ academic performance to a high extent. The extent of influence could even be superlative (very high extent), depending on the particular component of non-cognitive skills being investigated. The implication is that appropriately developed non-cognitive skills are needed to enhance students’ academic achievement, and indeed success in their other human endeavours. In addition, adequately cultivated non-cognitive skills have the tendency to curb examination malpractices in secondary schools in Rivers State and Nigeria at large.

RECOMMENDATION

Based on the findings of this study, it is recommended that:

1. Parents should enable their children and wards to acquire the non-cognitive skills of resilience and perseverance to enhance their academic achievement and build strong success strategies.
2. Teachers should inculcate in their students the non-cognitive skills of self-control and self-perception to enhance not only their academic achievement but success in all their endeavours.
3. Government and should create suitable learning atmosphere to develop students’ non-cognitive skills of resilience, self-control, perseverance, and self-perception to enhance their academic achievement and other survival tendencies.
4. Students should be given task that will enhance their non-cognitive skills of resilience, self-control, perseverance, and self-perception to enhance not only their academic achievement but success in all their endeavours.
REFERENCES