Academic Resilience as a Predictor of Academic Burnout among Form Four Students in Homa-Bay County, Kenya

Syprine Aoko Oyoo, PhD Student
Kenyatta University, Department of Educational Psychology
P.O. Box 43844-00100 Nairobi, Kenya
Tel: +254-725281348
syprine22@gmail.com

(Corresponding Author)

Dr. Peter Mucheru Mwaura, PhD, Senior Lecturer
Kenyatta University, Department of Educational Psychology
P.O. Box 43844-00100 Nairobi, Kenya
Tel: +254-721425743
Mwaura.peter@ku.ac.ke

Dr. Theresia Kinai, PhD, Senior Lecturer
Kenyatta University, Department of Educational Psychology
P.O. Box 43844-00100 Nairobi, Kenya
Tel: +254-721343236
Kinai.theresia@ku.ac.ke

Abstract
Academic burnout has become one of the most common problems in institutions of learning. It negatively affects students' wellbeing, creativity and effectiveness in educational settings. This study was therefore designed to establish the extent to which academic resilience predicts academic burnout among form four students in Homa-Bay County, Kenya. The study was guided by conservation of resource theory. A correlational research design was adopted. A sample of 714 was selected from thirty one public secondary schools. Data collection was through questionnaires adapted from Resilience Scale (RS14) and Maslach Burnout Inventory-Student Survey (MBI-SS). Both descriptive and inferential statistics were used. Data was analyzed using both Pearson Correlation Moment Coefficient and hierarchical regression techniques. Results revealed a negative statistical correlation between academic resilience and academic burnout ($r(712) = -0.24$, $p < .05$) and academic burnout was negatively and significantly predicted by academic resilience ($\beta = -0.21$, $p < .05$). These findings have implications for teachers and school administrators in enhancing and enforcing programs that train students on resilience skills.

Keywords: Academic Resilience; Academic Burnout; High school students
1.1 Introduction

Education is progressively driven by measurable goals and objectives. As such, learners are made to meet standards already set for them by the institutions where they learn, or by the high entry requirements set by higher institutions of learning. In view of this, learners spend a significant amount of time of their school life on demanding academic activities that they hope would make them accomplish their academic goals. In the process, they may get emotionally and physically exhausted. According to Schaufeli, Pinto, Salanova and Bakker (2002) when learners are exposed to long term situations that seem to be physically and emotionally demanding, their mental and physical energy tend to get depleted, leading to academic burnout. Academic burnout can be defined in variety of ways, but the most widely used definition is that by Schaufeli, Pinto, Salanova and Bakker (2002) describing it as a kind of feeling of exhaustion arising from academic requirements and demands accompanied by disinterested attitudes and pessimistic feelings about assignments. Academic burnout has been viewed as comprising of three main sub-categories such as; emotional exhaustion, cynicism and academic inefficiency. Emotional exhaustion arises from the academic pressure exerted upon the students due to competitive nature of academics and the need to excel. Cynicism on the other hand emerges when learners are either disappointed or frustrated by failure to excel as expected. Indeed academic burnout has become one of the most common problems in institutions of learning in Kenya (Kay & Wanjohi n.d.; Winga, Agak & Ayere 2016). It has been brought about by fear of failure, competition and pride that has pushed parents and teachers to put in place coercive activities that exert enormous pressure on the learners to excel in the academic field. For instance, various high schools have resorted to remedial teaching that is carried out after normal teaching hours, holiday tuition and rigorous weekly tests aimed at helping learners pass their examinations (Maithya & Mutua, 2015). Under these conditions, students become susceptible to academic burnout which is manifested in the form of absenteeism, high dropout rate and low academic achievement (Rahmati 2015; Salmela-Aro & Upadyaya, 2014).

Homa-Bay County, which is the study location of this work, experiences declining academic pass rates in the national examinations. Over the last three years there has been an increase in candidature in KCSE examinations from 13,700 in 2014 to 16,470 in 2016. This increase in candidature has not translated into an increase in the number of students who obtain the minimum grade of C+ required for university entry, with the highest drop registered in 2016. Candidates who obtained between grades A to C+ dropped from 39.3% in 2014 to 16.9% in 2016. Over the same period, the county has posted an average of 26% of students who obtained grade D and below in the national examinations. This average is slightly lower than the national average of 36%. Many factors have been attributed to low academic grades in the region over the years, amongst them; principals' leadership styles (Obama, Akinyi, & Orodho, 2015), student characteristics (Ogweno, Kathuri, & Obara, 2014) and interpersonal conflicts (Ayoma, 2013).

Many studies have revealed that academic achievement is determined by many factors, but little has been done on how academic burnout relates to students' academic achievement in the region. It is evident from empirical studies that students who experience academic burnout perform poorly in academic activities (Akbay and Akbay, 2016; Salanova, Schaufeli, Martinez, & Breso, 2010; Winga et al., 2016). Kay and Wanjohi (n.d) observed that students who experience academic burnout exhibit characteristics such as; negative perceptions of the learning environment, high levels of perceived workload, lack of enthusiasm in what they are studying, inability to constantly attend classes, lack of participation in class activities and meaninglessness in academic activities, resulting in poor academic performance. It is based on the aforementioned literature that the current study...
investigated resilience as a predictor of academic burnout among high school students. Studies have revealed that students who have high academic resilience are able to withstand stressful academic activities (García-Izquierdo et al. 2015; Kamalpour, Azizzadeh-Forouzi & Tigrany, 2017; Kotzé & Kleynhans, 2014).

Academic resilience is a concept that focuses on strengths and optimal functioning of learners. Jensen, Trollope, Waters and Everson (2008) defined resilience as a positive attitude and effective strategy that one employs in response to stressors. Although learners experience the same challenging or threatening circumstances, academically resilient learners are able to turn stressful events into opportunities for personal growth and benefit (Santhosh & James, 2013). Accordingly, they possess the capacity for successful adaptation, and their responses to the demands do not impair their abilities, instead they bounce back with enhanced competencies (Santhosh & James, 2013). This implies that academically resilient students are likely to sustain high level of academic motivation and performance in spite of the challenging conditions that put them at risk of doing poorly in academics. Empirical research has also shown that academic resilience plays a moderating role in academic burnout (García-Izquierdo et al., 2015), and it can significantly predict students’ academic achievement (Abolmaali & Mahmudi, 2013; Mwangi, Okatcha, Kinai, & Ireri, 2015). Resilience may be one of the important resources that help students minimize the effects of academic burnout.

Although academic burnout is a well-documented phenomenon, there have been few attempts to examine academic resilience as its predictor among high school students in the Kenyan context. Few educational researchers have investigated the relationship between academic resilience, academic motivation and academic achievement in Kenya (Mwangi et al., 2015; Mutweleli, 2014). However, these studies were conducted in different geographical regions and the variables were not studied in relation to academic burnout. Other researchers have also made great effort to unravel the causes of high dropout rate, absenteeism and poor academic achievement in Homa-Bay County (Ogweno et al., 2014; Ojwang, 2012; Ololtua, 2012) but the findings have not been conclusive. Winga et al. (2016) for instance, explored academic burnout in relation to gender and academic achievement, but the study did not focus on academic resilience as an antecedent of academic burnout among high school students.

1.2 The Statement of the Problem

Over the past three years, the county has registered relatively large number of students who sit for national examinations but obtain grades that are below the minimum requirement for post-secondary education. Poor performance of students in any educational endeavor is a matter of concern. This is because success in education is the springboard to the attainment of Sustainable Development Goals (SDG), as well as social mobility. Local studies (Mwangi et al., 2015; Mutweleli, 2014). Ogweno et al., 2014; Ojwang, 2012; Ololtua, 2012; Winga et al. 2016) have explored various factors that affect learners’ academic achievement. However, little attention has been paid to other factors such as academic burnout that may also influence academic achievement in the County. The central problem of this study was to explore academic resilience as a predictor of academic burnout. Research has revealed that academic resilience is a resource that can be nurtured to enable students cope in the face of academic challenges and avoid the negative effects of academic burnout. Although extant literature has revealed a relationship between academic resilience and academic burnout, much of the available research has been conducted in other countries such as Spain, China, South Africa, and Nigeria among others. The extent to which such results can be generalized considering the differences in cultural settings cannot be ascertained.
without conducting proper investigations. Moreover, available studies in Kenya have focused on how academic resilience predicts academic achievement. Little attention has been paid to how academic resilience predicts academic burnout. Therefore this study attempts to fill this gap.

1.3 Purpose and Objectives of the Study
The main purpose of this study was to establish whether academic resilience predict academic burnout of form four students in Homa-Bay County.

Objectives of the Study
i. To determine the relationship between academic resilience and academic burnout
ii. Establish the extent to which academic resilience predicts academic burnout.

1.4 Theoretical Framework
The study used conservation of resource theory by Hobfoll (1989) to explain some of the internal and external resources that students use to cope with challenging situations within their learning environment. Conservation of resource theory (COR) rests on the basic tenet that individuals strive to obtain, retain, foster and protect resources for their well-being and positive sense of self. Resources are entities that have intrinsic and instrumental value. Hobfoll cites personal resources such as; self-efficacy, self-esteem, resilience, motivation and optimism. Other resources include, supportive social networks from parents, teachers, peers and significant others and energy resources. Personal resources together with supportive social support networks are related to overall wellbeing of students. Energies are resources valued for their aid in obtaining other resources. According to Hobfoll, the more resources people have at their disposal, the more the demands are perceived as less taxing and productive coping strategies are employed in dealing with them. Accordingly, Hobfoll (2002) asserts that “…the degree to which individuals appraise something as threatening, and the coping choices they make, are largely determined by the resources they have” (p.312). Consequently, any persistent threat to valued resources is more likely to culminate into burnout (Hobfoll, 1989).

On the basis of this theory therefore, academic burnout may be described in terms of resource loss. Resources could be lost due to high levels of academic demands exerted on students threatening their ability to maintain academic resilience as a personal resource that may help them cope. If the rate at which these demands use students’ resources is greater than the rate at which they are replenished, then there is likelihood that students may experience academic burnout. Hobfoll (2011) postulated that students with greater resources are less vulnerable to resource loss and more capable of orchestrating resource gain to guard them against academic burnout. COR theory therefore provides a comprehensive approach to the concept of academic burnout. The Theory has been used by other researchers in explaining the concept of burnout and engagement among students. Alarcon (2011) conducted a meta-analysis on job demands, resources and attitudes and their relation with burnout in regard to COR theory, and revealed that higher demands, lower resources and lower adaptive organizational attitudes were associated with burnout. Zhang, Klassen and Wang (2013) also used COR theory among 730 Chinese middle school student. The results maintained that, individuals experience burnout when requirements and resources are unbalanced.

2.1 Review of Related Literature
Many studies have been conducted in the area of academic resilience and academic burnout. Kamalpour, Azizzadeh-Forouzi and Tirgary (2017) conducted a descriptive correlational study on
academic resilience and academic burnout among nursing students drawn from Kerman University in Iran. The study involved 161 participants whose ages ranged between 19 to 24 years, with a sampled population consisting of both male (37.3%) and female (62.7%). The results revealed a significant relationship between academic burnout and academic resilience among students. Students who had higher resilience reported lower burnout. Since this study used university students taking a nursing course, such students are assumed to be self-determined and goal oriented due to their age and level of schooling. There was likelihood that these students must have acquired more skills that help them navigate the challenges within their learning environment. With that in mind, the current study was necessary to explore the predictive value of academic resilience on academic burnout to find out if academic resilience varied in terms of level of schooling and age. This was hoped to expand the scope to which the results can be generalized.

Yaghoobi, Mokhtaran and Mohammadzadeh (2017) found that resilience has an important role in academic achievement among high school students in Hamadan, in Iran. The study was carried out with the aim of anticipating academic burnout based on cognitive styles and psychological resilience. Using multivariate regression analysis to establish the predictive value of cognitive styles and psychological resilience, results indicated that psychological resilience was a significant predictor, in determining students’ academic burnout. Yaghoobi et al. (2017) argued that academic resilience can be seen in terms of self-efficiency that learners use to prevent many problems within a learning environment, including academic burnout.

García-Izquierdo et al. (2015) conducted a research with the aim of analyzing the role of resilience in the dimensions of academic burnout syndrome and psychological health. The participants were drawn from undergraduate nursing students at a university in Spain. The sampled population included 218 students whose ages ranged between 19 and 50 years. Out of the sampled population, 75.7% were female and 24.3% were male. Using descriptive statistics and Pearson correlation coefficients, results revealed that there was a significant negative relationship between resilience and emotional exhaustion dimension of burnout. The study further revealed a direct relationship between resilience and academic efficacy. Students having higher level of resilience obtained higher scores in academic efficacy and lower score in emotional exhaustion. Resilience was observed to play a moderating role between emotional exhaustion and psychological health. The study concluded that resilience is an individual skill used to face unfavorable situations and can be conceived as a modifiable personal feature which can be learnt and developed.

The relationship between academic resilience and academic burnout can also be inferred from a study by Kotzé and Kleynhans, (2014). The study investigated aspects of psychological well-being and resilience as predictors of the academic achievement of a group of first year students at a higher education institution, in South Africa. The sample consisted of 789 students of whom 43% were female and 57% male. Data was analyzed using stepwise multiple regressions to determine whether burnout, engagement and resilience were significant predictors of academic achievement. The results showed that academic resilience, emotional exhaustion and cynicism were significant predictors of academic achievement. This study did not investigate the direct relationship between academic resilience and academic burnout, which was the major focus of the current study. Whereas the sample was drawn from university students, the present study drew its sample population from high school students to compare results using different age groups.
Locally, not much has been done on academic resilience as a predictor of academic burnout among high school students, but the importance of academic resilience can be inferred from a study on academic resilience and academic achievement. Mwangi et al. (2015) investigated the relationship between academic resilience and academic achievement among 390 form three students in Kiambu County. The participants comprised of 192 females and 198 males. The age of the sampled population ranged between 15 to 26 years. The results revealed a strong and positive correlation between academic resilience and academic achievement. Further analysis indicated that among the six sub-scales of academic resilience, sense of meaning and purpose, high expectations, autonomy and sense of self had a high positive predictive value on academic achievement. Although this study used a sample drawn from high school students, it did not investigate how academic resilience predicts academic burnout. This concern was addressed in the current study.

3.1 Research Design and Methodology
The study used a correlational research design.

3.2 Participants
The study involved 714 form four students drawn from 307 public secondary schools, in Homa-Bay County, Kenya. The participants mean age was 18.11 with a standard deviation of 1.49, ranging from 15 to 23 years. More than half (66.7%) of the participants were aged between 18 and 20 years. Those aged between 15 and 17 years accounted for 31.5% while only 1.8% was in the age bracket of 21-23 years. A Majority of the participants were drawn from boys’ boarding schools representing nearly 41.6% of the total participants, followed by participants from co-educational day schools (34%) and girls’ boarding schools (24.4%). Subsequently, more males (436) constituting 61.1% than females 278 (38.9%), participated in the study. The choice for form four was informed by the fact that they were already preparing for national examinations (KCSE) and they were likely to experience the greatest amount of pressure for good academic performance. Such pressure may require students to have some aspects of academic resilience to enable them cope.

3.3 Measures
A researcher-developed questionnaire was used to collect data on the participants’ demographic information on sex, age and type of school; whether boarding school or day school. Academic resilience and academic burnout were measured using adapted scales. The Short form RS -14 developed by Wagnild (2009) consisted of 14 items which measured academic resilience in five sub-scales namely: Confidence/self-reliance, Sense of purpose, Equanimity, Perseverance (commitment) and Authenticity. The RS-14 items were all positively worded. It was scored at a 6-point Likert scale ranging from 1 point for completely disagree to 6 points for completely agree. The reliability of the original instrument was reported to range from 0.72 to 0.94. In this study, the reliability of the instrument using Cronbach’s Alpha reliabilities was found to be 0.68. The comparatively low reliability compared to the original instrument could be attributed to cultural and age differences.

Maslach Burnout Inventory-Student Survey (MBI-SS) (Schaufeli, Martinez, Pinto & Bakker 2002), consisted of fifteen (15) items. The Instrument measures burnout on three subscales; Emotional exhaustion (5 items), cynical attitude towards academic work (4 items), and academic efficacy (6 items). All the items measuring emotional exhaustion and cynicism are negatively worded where as those measuring academic efficacy are positively worded, therefore they were reverse coded. MBI-
SS is scored at 7-point Likert scale ranging from 0 point for never to 6 points for always. Higher score of 30 on emotional exhaustion, higher score of 24 on cynicism and lower score of 6 on efficacy was indicative of higher levels of burnout. Schaufeli et al. (2002) reported good internal consistency reliability of MBI-SS at 0.86 across many samples. In the current study, internal consistency was measured using Cronbach alpha and it was found to be 0.78. This was found to be within the acceptable threshold, making it to be adapted by the researcher.

3.4 Procedure
The first step of the study involved piloting the study tools among 38 (19 boys and 19 girls) randomly selected students drawn from a co-educational day school in Homa- Bay County. The selected school did not participate in the main study. The pilot study was necessary to ensure that the items were of the right difficulty level, and the time needed to complete the questionnaire was adequate. The process helped the researcher address ambiguities in the questionnaire. Using information from the pilot study, some changes were made and incorporated in the instruments to suit the current study population. Finally, the process helped in enhancing the reliability and the validity of the research instruments. In order to select the sample, thirty one schools were first selected and then from each school, simple random sampling technique was employed to get the sample population required for the study.

Data was collected using a group administered survey on a normal working day, during normal class hours. After the students were assembled in the school hall, they were briefed about the broad aims of the study, how their confidentiality was going to be ensured and instructions on how to fill the questionnaire using paper and pencil method. Enough time was given to the participants to complete the exercise. The questionnaires were collected on the same day, at the end of the session.

4.1 Results
The following table summarizes the descriptive analysis of academic resilience and academic burnout showing the mean, standard deviation, skewness and kurtosis.

<table>
<thead>
<tr>
<th></th>
<th>Range</th>
<th>Min</th>
<th>Max</th>
<th>M</th>
<th>SD</th>
<th>Sk</th>
<th>Kur</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARGS</td>
<td>54.00</td>
<td>41.00</td>
<td>95.00</td>
<td>74.48</td>
<td>9.29</td>
<td>-.47</td>
<td>.18</td>
</tr>
<tr>
<td>ABGS</td>
<td>73.00</td>
<td>6.00</td>
<td>79.00</td>
<td>31.99</td>
<td>18.79</td>
<td>1.03</td>
<td>-.09</td>
</tr>
</tbody>
</table>

Note. N = 714; ARGS = Academic Resilience Global Score; ABGS = Academic Burnout Global Scores; Min = Minimum; Max = Maximum; M = Mean; SD = Standard Deviation; Sk = Skewness; Kur = Kurtosis

Table 1 indicates that the mean for academic resilience was high (M = 74.48, SD = 9.29). All the participants rated themselves highly in the academic resilience scale as indicated by the coefficient of skewness which was recorded at -.47. The participants experienced low academic burnout as evidenced by the overall mean (M = 31.99, SD = 18.79). This may imply that many students can successfully retain and sustain their inner resources that cushion them against academic burnout. To gain more understanding on how the participants responded to the variables under study, descriptive analysis of academic resilience and academic burnout by school type, sex and age were also done as presented Table 2.
Table 2
Descriptive Statistics for Academic Resilience and Academic Burnout Scores by School Type, Sex and Age

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Academic Resilience</th>
<th>Academic Burnout</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>GB</td>
<td>76.82</td>
<td>8.84</td>
</tr>
<tr>
<td>BB</td>
<td>75.24</td>
<td>8.87</td>
</tr>
<tr>
<td>CD</td>
<td>71.88</td>
<td>9.52</td>
</tr>
<tr>
<td>Boys</td>
<td>74.44</td>
<td>9.38</td>
</tr>
<tr>
<td>Girls</td>
<td>74.55</td>
<td>9.16</td>
</tr>
<tr>
<td>15-17</td>
<td>75.58</td>
<td>9.53</td>
</tr>
<tr>
<td>18-20</td>
<td>74.14</td>
<td>8.95</td>
</tr>
<tr>
<td>21-23</td>
<td>68.08</td>
<td>13.51</td>
</tr>
</tbody>
</table>

Note. N = 714; GB = Girls’ Boarding schools; BB = Boys’ Boarding schools; CD = Co-educational Day schools; M = Mean; SD = Standard Deviation; Sk = Skewness

The participants from girls’ boarding schools had the highest mean of 76.82 (SD = 8.84) in academic resilience followed by participants from boys’ boarding schools (M = 75.24, SD = 8.87), and participants from co-educational day schools (M = 71.88, SD = 9.52). When the mean score of both boys and girls was compared, the study found no significant mean differences between the two in academic resilience; boys reported a mean of 74.44 (SD = 9.38) while girls had a mean of 74.55 (SD = 9.16). It was also revealed that participants from girls’ boarding schools had a mean of 25.94 (SD = 13.50) in academic burnout, participants from boys’ boarding (M = 32.45, SD = 19.92) and co-educational day schools (M = 35.77, SD = 19.59). The data obtained was used to categorize the participants into both a low and high academic resilience and academic burnout group as shown in Table 3.

Table 3
Levels of Participants Academic Resilience and Academic Burnout

<table>
<thead>
<tr>
<th>Level of Academic Resilience</th>
<th>Level of Academic Burnout</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
</tr>
<tr>
<td>Low</td>
<td>27</td>
</tr>
<tr>
<td>High</td>
<td>687</td>
</tr>
<tr>
<td>Total</td>
<td>714</td>
</tr>
</tbody>
</table>

Note. N = 714; f = Frequency

The results from Table 3 indicate that a majority of the participants registered high academic resilience and low academic burnout. However few participants recorded low academic resilience and high academic burnout. This may have implied that majority of these students had enough internal or external resources they use to withstand academic pressures.

In order to determine the relationship between academic resilience and academic burnout, it was hypothesized that there was no significant relationship between academic resilience and academic burnout. A Pearson Product Moment Correlation coefficient was used to test this hypothesis. The results revealed a weak inverse statistical correlation between academic resilience and academic burnout (r (712) = -.24, p < .05). This result suggested that students having higher level of academic resilience are likely to experience low academic burnout. Therefore, the null hypothesis was
rejected and conclusion was made that academic resilience has a significant relationship with academic burnout. Further analysis was done to find out the intercorrelations among different dimensions of academic burnout and academic resilience. The correlation summary revealed that cynicism had a strong negative correlation with academic resilience ($r (712) = - .23, p < .05$) and with academic efficacy ($r (712) = -.76, p < .05$). Similarly, emotional exhaustion was negatively and significantly correlated with academic resilience ($r (712) = -.15, p < .05$) and academic efficacy ($r (712) = -.64, p < .05$). Additionally, academic efficacy was positively and significantly correlated with academic resilience ($r (712) = .26, p < .05$). To establish whether learners with different levels of academic resilience had significant mean differences in academic burnout scores, an independent sample t-test was carried out and the summary of the results presented in Table 4.

### Table 4
**Mean Differences in Academic Burnout with Low and High Academic Resilience**

<table>
<thead>
<tr>
<th>LAR</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>308</td>
<td>36.29</td>
<td>19.69</td>
<td>5.44</td>
<td>712</td>
<td>.00</td>
</tr>
<tr>
<td>High</td>
<td>406</td>
<td>28.72</td>
<td>17.40</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. N = 714; ABGS = Academic Burnout Global Score; LAR = Level of Academic Resilience; M = Mean; SD = Standard Deviation*

The independent sample t-test revealed a statistically significant difference between the means of the two groups ($t (712) = 5.44, p < .05$); the low academic resilient group ($M = 36.29, SD = 19.69$) and the high academic resilient group ($M = 28.72, SD = 17.40$). The difference was in favor of those participants in the low academic resilient group. This result confirmed that students who have low academic resilience experience high academic burnout.

To establish whether academic resilience predicted academic burnout, a null hypothesis was formulated as: Academic resilience does not significantly predict academic burnout of high school students. A hierarchical regression analysis was conducted to test this hypothesis and to determine the contribution of academic resilience on academic burnout, while controlling for the effects of school type, sex and age. The analysis was conducted in four stages with academic burnout as the dependent variable. School type was entered at stage one of the regression. Sex was entered at stage two, age was entered at stage three and academic resilience which was the predictor variable entered at stage four as presented in Table 5.

### Table 5
**Model Summary of Academic Resilience on Academic Burnout**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
<th>SEE</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.20a</td>
<td>.04</td>
<td>.04</td>
<td>18.45</td>
<td>2,711</td>
<td>14.53</td>
<td>.00</td>
</tr>
<tr>
<td>2</td>
<td>.20b</td>
<td>.04</td>
<td>.04</td>
<td>18.47</td>
<td>3,710</td>
<td>9.79</td>
<td>.00</td>
</tr>
<tr>
<td>3</td>
<td>.22c</td>
<td>.05</td>
<td>.04</td>
<td>18.41</td>
<td>5,708</td>
<td>7.01</td>
<td>.00</td>
</tr>
<tr>
<td>4</td>
<td>.30d</td>
<td>.09</td>
<td>.08</td>
<td>18.02</td>
<td>6,707</td>
<td>11.40</td>
<td>.00</td>
</tr>
</tbody>
</table>

*Note. N = 714*

a. Predictors: (Constant), School Type
b. Predictors: (Constant), School Type, Sex
c. Predictors: (Constant), School Type, Sex, Age
d. Predictors: (Constant), School type, Sex, Age, Academic Resilience
The hierarchical regression analysis revealed that school type significantly contributed to the model, 
\( F(2,711) = 14.53, p < .05, \ R^2 = .04 \). It was also evidenced that school type had a positive relationship with academic burnout \( (r = .20) \). It accounted for 4% of the variation of academic burnout. When sex was added into the model at stage two, no change in the percentage of variability in academic burnout was noticed though the addition of sex was equally significant \( F(3,710) = 9.79, p < .05, \ R^2 = .04 \). Introduction of age into the model explained an additional 1% of the variation in academic burnout. Finally when academic resilience was added into the regression model at stage four, an additional 4% explained the variation in academic burnout. The change was significant \( F(6,707) = 11.40, p < .05, \ R^2 = .09 \). In the overall model, all the four predictors accounted for 9% of variation in academic burnout with academic resilience accounting for 4%. Results indicated that among the four variables, it was only academic resilience which was a significant predictor of academic burnout. Meanwhile, the predictive value of school type, sex, age and resilience on academic burnout is presented in Table 6.

### Table 6

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>(Constant)</td>
<td>64.12</td>
<td>6.29</td>
<td>10.18</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>GB</td>
<td>-4.17</td>
<td>2.93</td>
<td>-.10</td>
<td>-1.42</td>
<td>.16</td>
</tr>
<tr>
<td>CD</td>
<td>2.13</td>
<td>1.92</td>
<td>.05</td>
<td>1.11</td>
<td>.27</td>
</tr>
<tr>
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<td>1.66</td>
<td>2.37</td>
<td>.04</td>
<td>.70</td>
<td>.48</td>
</tr>
<tr>
<td>15-17</td>
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<td>1.53</td>
<td>-.01</td>
<td>-.25</td>
<td>.80</td>
</tr>
<tr>
<td>21-23</td>
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<td>5.14</td>
<td>.07</td>
<td>1.92</td>
<td>.06</td>
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<tr>
<td>ARGS</td>
<td>-52</td>
<td>.09</td>
<td>-.21</td>
<td>-5.64</td>
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**Note.** GB = Girls Boarding schools; CD = Co-educational Day schools; ARGS = Academic Resilience Global Score

a. Dependent Variable: Academic Burnout

Table 6 revealed that participants attending girls’ boarding schools \( (\beta = -.10, p > .05) \) were less likely to experience academic burnout as compared to the participants in boys’ boarding schools. Meanwhile, participants from co-educational day schools were more likely to experience academic burnout \( (\beta = .05, p > .05) \). Participants in the age bracket of 15-17 years showed negative correlation with academic burnout, while those in the age bracket of 21-23 showed positive correlation with academic burnout. This implied that older students were more likely to experience academic burnout than younger students.

In regard to sex differences, male participants showed positive correlation with academic burnout, meaning that they were more likely to experience academic burnout than the female participants. More importantly, academic resilience was found to be a significant predictor of academic burnout \( (\beta = -.21, p < .05) \). The negative \( \beta \) value was an indication that academic resilience negatively predicted academic burnout. This implied that one standard deviation increase in students’ academic resilience score would lead to a 0.21 standard deviation decrease in students’ academic burnout score. This suggested that academic burnout occurred when students experienced low...
academic resilience. These results therefore led to the rejection of the null hypothesis and drawing of the conclusion that academic resilience significantly predicted academic burnout.

4.2 Discussion
The results indicated that there was a negative relationship between academic resilience and academic burnout. An independent sample t-test confirmed the existence of a statistically significant difference between the means of the low academic resilient group, and the high academic resilient group. Additionally, academic resilience negatively and significantly predicted academic burnout. These results suggested that students with high academic resilience skills experience low academic burnout. Although students who possess this internal resource may also encounter stressful circumstances, they may be able to face the challenges with confidence and bounce back with minimal negative effects on their psychological well-being (King et al., as cited in Hobfoll 2002). These results are consistent with prior research conducted by Kamalpour et al.,(2017) that revealed a relationship between academic resilience and academic burnout. Basically, resilient students are able to turn challenging environments into opportunities for personal growth and benefit. This is because of the confidence and the composure they embrace to enable them bounce back and achieve their educational goal. Such students are less likely to experience academic burnout.

These findings are also in agreement with the study by García-Izquierdo et al. (2015) who found a significant negative relationship between academic resilience and emotional exhaustion of burnout. The study further revealed a direct relationship between resilience and academic efficacy. This was to the extent that students who had higher levels of academic resilience obtained higher scores in academic efficacy and lower scores in emotional exhaustion. Congruent to these findings was the study done by Kotzé and Kleynhans, (2014). The study concluded that resilience, emotional exhaustion and cynicism were significant predictors of academic burnout.

Notably, the earlier studies drew their sample population from different countries; Iran, Spain, West Indies and South Africa respectively. The population consisted of university students. In the current study, the sample population was drawn from high school students. Despite the differences in terms of age, location of the study and level of schooling, consistent results were revealed. This may mean that academic resilience has been conceptualized in similar ways across all cultures and cuts across all ages. This argument is also in line with the assertion by Hobfoll (2002) that academic resilience can be learnt and developed at any level of schooling enabling students to develop the core characteristic of perseverance and confidence which help them avoid the negative effects of academic burnout.

4.3 Conclusion
Based on the results of the present study, a conclusion may be made that academic resilience is at the background of every academic activity that students undertake and it is an internal resource that may guard students against academic burnout. The quality of academic resilience signifies students’ ability to face academic pressure. Hobfoll (2002) described resilience as a personal resource that learners strive to obtain and protect for their well-being. Based on these results therefore, it was recommended that teachers and school administrators put in place certain programs that may train students in resilience skills. They may strengthen resilience skills by developing social competence and increasing students’ interactive sessions especially during extra curricula activities. This is the
time when students learn about realistic goal setting, problem solving, perseverance, and confidence. However, the results in the present study are not conclusive. This is informed by the fact that academic burnout is a factor of many internal and situational variables. It is therefore recommended that other studies be done in the same area to examine other internal factors other than academic resilience that predicts academic burnout.

REFERENCES


