UNIVERSITY OF CAPE COAST

ACADEMIC RESILIENCE AND ACADEMIC ENGAGEMENT AS PREDICTORS OF ACADEMIC BURNOUT AMONG POSTGRADUATE STUDENTS OF THE UNIVERSITY OF CAPE COAST, GHANA

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BY

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Thesis submitted to the Department of Education and Psychology of the Faculty of Educational Foundations, College of Education Studies, University of Cape Coast, in partial fulfilment of the requirements for the award of Master of Philosophy Degree in Educational Psychology

DECEMBER 2022

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature: …….. Date: …….

Name: ……..

Supervisors' Declaration

I hereby declare that the preparation and presentation of the thesis was supervised in accordance with the guidelines on thesis laid down by the University of Cape Coast.

Supervisor's Signature: …… Date: ……..…….

Name: …….

ABSTRACT

The study examined academic resilience and academic engagement as predictors of academic burnout among postgraduate students of the University of Cape Coast in Ghana. The study was guided by seven objectives which were transformed into three research questions and four hypotheses. The descriptive survey design with a quantitative approach was employed in the conduct of the study. The population of the study comprised regular postgraduate students (Level 800 and 900) at the University of Cape Coast, with a total number of 847. Through the stratified and simple random sampling techniques, 265 respondents participated in the study. Academic Resilience Scale, University Student Engagement Inventory and the Maslach Burnout Inventory Student Survey were adapted for the collection of data. The data collected were analysed using means and standard deviations, simple linear regression, multiple linear regression analysis and the independent samples t-test. It was found that majority of respondents had lower levels of academic resilience and academic engagement but had a high academic burnout level. Also, it was revealed that academic resilience and academic engagement were significant predictors of academic burnout. The study further found that there were no statistically significant differences in the academic burnout of students with regards to gender and academic levels. It was recommended that management of the University in collaboration with lecturers and counsellors should put in place policies and measures to assist postgraduate students address the issue of academic burnout as it has an effect on them.

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DEDICATION

To my God and my Parents.

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CHAPTER ONE

INTRODUCTION

The importance of learning has been widely and deeply recognised, and educators, psychologists, and researchers have attached increasing importance to resilience in the academic setting. The University is a crucial transition period for student development and being resilient is essential for success during the educational journey. Postgraduate students are expected to acquire the necessary knowledge and skills and demonstrate it at various workplaces after completion. Furthermore, postgraduate students develop into independent adults with societal responsibilities in universities. Since most postgraduate students are engaged with diverse classroom activities as well as non-academic related duties such as work and family responsibilities, they are likely to experience more psychological pressure and academic strain. Whether postgraduate students can academically adapt to the requirements of the learning environment and still stimulate their most significant learning potential may be related directly to how they manage the adverse emotional, physical, and mental reactions to a prolonged study that results in exhaustion, frustration, lack of motivation and reduced ability. If this problem is not solved, it is highly likely to have significant adverse effects on the academic success of postgraduate students during their postgraduate study. For instance, postgraduate students in Ghana, especially at the University of Cape Coast, are expected to meet the programme's requirements within a stipulated time regardless of the challenges they face as students and complete their studies. Therefore, they must be resilient by meeting the target, or they may experience

academic burnout, affecting the successful completion of their educational journey.

Background to the study

Academic success in higher education requires a lot of intellectual resources and behavioural input towards one's studies and academic interactions (McCallen & Johnson, 2020). Usually, students experience the pressure of workload, deadlines, and obligations that their academics impose on them. All these factors put students in a situation of constant stress. Academic activities in higher institutions are no exception, as postgraduate students have obligations to meet as students. Higher education is a demanding context in which students work to achieve a degree: they attend lectures, undertake assignments and presentations to pass courses, and strive to meet deadlines that accompany such tasks (de Lima, 2021).

The concept of "burnout" was first proposed by Freudenberger (1974). This concept was gradually accepted as work-related trouble and became an issue among students as research in the area increased. Pines and Katry (1981) carried out a comparative study aimed at helping college students and professional workers. They found that the degree of burnout among college students was more significant than that among professional workers at work, and they first proposed the concept of academic burnout (Pines & Katry, 1981). Warlick, Van Gorp, Farmer, Patterson, and Armstrong (2021) also observed in their study that there was no significant difference among students and workers in their levels of burnout and concluded that both groups of people experience burnout. Many studies have also identified burnout as an obstacle among students in educational settings (Grace, 2018; Xie et al., 2019;

Hodge, Wright, & Bennett, 2020). These studies highlighted the impact of academic burnout on students' academic success.

Individuals may experience burnout in any setting, and the school is not an exception. Students may share feelings of emotional exhaustion, inadequacy and a cynical attitude towards the learning process in the school. The burnout that occurs in educational settings is known as academic burnout. Although burnout has typically been considered in working environments (Purvanova & Muros, 2010), recent studies have shown that it affects students (Ferreira & Lucca, 2015; Ye, Huang & Liu, 2021). Thus, students' academic burnout results from long-term academic pressure or load and energy consumption which causes a gradual decrease in students' enthusiasm due to school work and activities.

Academic burnout has been defined as the syndrome of experiencing emotional exhaustion, cynicism, and reduced efficacy in the educational setting (Maslach & Leiter, 2016). Academic burnout is a psychological syndrome that may arise due to chronic interpersonal stressors at school or work (Ferreira & Lucca, 2015). It is characterised by feelings of energy depletion and emotional exhaustion. These feelings of exhaustion can be caused by educational demands, increased mental distance from one's studies, and feelings of cynicism related to one's studies. Such feelings may be coupled with reduced personal or professional efficacy, which is the feeling of incompetence as a student (Maslach & Leiter, 2016). Burnout can thus happen to anyone involved in a psychologically engaging activity like pursuing postgraduate studies (Costa, Santos, Santos, Melo & Andrade, 2012). University education is an intrinsically demanding time in many students' lives

(Galbraith & Merrill, 2015). Several demands on a student's time include course work, relationships, examinations, part-time jobs, internships, pressure from parents and guardians, and practical/ward work for medical students (Galbraith & Merrill, 2015). As such, many students are at risk of academic burnout.

Academic burnout influences learning as well as students' overall health and well-being. Burnout syndrome has been described as being the result of chronic work-related stress. Usually, it is characterized by feelings of emotional exhaustion (being emotionally drained by intense contact with recipients, depersonalization or negative, cynical attitudes toward them or the work in general, and a sense of lack of personal work) (Durán, Extremera, Rey, Fernández-Berrocal, & Montalbán, 2006). Student burnout can lead to higher absenteeism, lower motivation to do required course work, and a higher percentage of drop out and negatively affects academic achievement (Yang, 2004).

Yavuz and Dogan (2014) proposed that, among students, "burnout refers to feeling exhausted because of study demands, having a cynical and detached attitude toward study, and feeling incompetent as a student" (p. 465). Thus, students in a burnout state often feel exhausted and adopt a cynical, withdrawn motivation toward their studies. According to Lin and Huang (2014), the syndrome of academic burnout is analogous to that of employees, which is associated with higher absence, a higher percentage of dropout, and a decrease in academic performance. Academic burnout is a syndrome related to overwhelming stress caused by a student's chronic overexposure to excessively pressing demands they can no longer meet (Romano et al., 2021).

Negative consequences of burnout in schools have made academic burnout one of the most widespread issues in educational institutions (Winga, Agak, & Ayere, 2016). Notably, students devote a substantial portion of their time at school to strenuous educational activities to achieve their academic objectives. As a result, they may get emotionally and physically exhausted due to the academic activities in school. When students are subjected to long-term settings that appear to be physically and emotionally demanding, their mental and physical energies are depleted, leading to academic burnout (Schaufeli, Martinez, Pinto, Salanova & Bakker, 2002).

Some studies have investigated academic burnout among male and female students (Purvanova & Muros, 2010; Walburg, 2014; Bikar, Marziyeh & Pourghaz, 2018). Many of these studies have found that girls and boys differed in their reports of levels of burnout. Considerable evidence suggests that girls experienced higher levels of academic burnout compared to boys (Salmela-Aro et al., 2008; Salmela-Aro et al., 2009), yet results from other studies conducted indicated that levels of academic burnout could also be higher among boys (Weckwerth & Flynn, 2006; Bikar, Marziyeh, & Pourghaz, 2018). However, other studies conducted with students have also shown no gender differences in exhaustion and burnout (Galán, Sanmartín, Polo & Giner, 2011; Cadime et al., 2016). Therefore, research on gender differences in burnout in academic settings have not been conclusive.

In the African context, some researchers have researched into academic burnout as a phenomenon (Freidman, 2014; Winga, Agak, & Ayere, 2016; Kamalpour, Azizzadeh-Forouzi & Tirgary, 2017; Oyoo et al., 2020). These studies have proven that academic burnout significantly influences and

impacts students' academic achievement, academic efficacy, resilience, and academic engagement, among others. However, there is scanty research into academic burnout among students in the Ghanaian context, especially at the university level. Previous studies have shown that academic resilience can be a protective trait against academic burnout (Oyoo, Mwaura, & Kinai, 2018; Janatolmakan et al., 2021; Romano et al., 2021).

Academically resilient students, it has been argued, demonstrate an extreme ability to pick themselves up following particularly traumatic events in their schooling and complete their studies with excellent results in the face of adversities or challenges (Romano et al., 2021). In addition, they can often benefit significantly from the school context in which they are placed, both in terms of the support and relationships they can establish (Frederickson et al., 2003; Yuan et al., 2018). Students may face and solve adversities or challenges through academic resilience. As an essential consequence, academic resilience involves student adaptation to the school environment and personal growth (De la Fuente et al., 2017). Academic resilience is a trait which aids students in attaining good academic outcomes despite adversity. It again reflects the ability to succeed academically despite a challenging or difficult circumstance in the educational process (Amuwa, 2015). Resilience in a literary context can also be identified as a student's ability to successfully deal with impediments, pressure, and challenges in the school setting.

Recent studies have focused on the role of resilient characteristics, deepening how they can effectively protect students from severe maladjustments, such as academic burnout (Fiorilli et al., 2020; Romano et al., 2019). Resilience is widely considered a personal capacity to efficiently

handle setbacks, challenges, and pressures (Luthans, Vogelgesang, & Lester, 2006) and adapt despite adverse circumstances. In the academic context, it is defined as the ability to maintain high levels of achievement, motivation, and performance in the face of adverse educational conditions (Martin & Marsh, 2006).

Academic resilience as a concept focuses on students' strengths and optimal functioning. Jensen, Trollope, Waters, and Everson (2008) defined resilience as a positive attitude and effective strategy one employs in response to stressors. Although students experience similar challenging or threatening circumstances, academically resilient students can turn stressful events into 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 academic motivation and performance despite the challenging conditions that put them at risk of performing poorly academically.

Empirical research has also shown that academic resilience affects academic burnout (García-Izquierdo et al., 2015). It can significantly predict students' academic achievement (Abolmaali & Mahmudi, 2013; Mwangi, Okatcha, Kinai, & Ireri, 2015). Resilience may be one of the critical resources that help students minimise the effects of academic burnout. Resilient students have successful beliefs about themselves and efficient skills: they know how to regulate their actions to achieve their goals and see mistakes as a way to improve their skills and knowledge. Previous studies have shown that

academic resilience effectively shields students from experiencing negative emotions derived from excessive academic strain and pressures (Bandura, Freeman & Lightsey as cited in Paciello et al., 2016). In addition, academically resilient students are more likely to recover from acute and chronic school-related difficulties (i.e., school burnout). Indeed, they can cope more with overwhelming school tasks showing higher passion and determination than their low-resilient counterparts (Martin & Marsh, 2006; Romano et al., 2019). While postgraduate students' academic resilience may affect their level of academic burnout, the level at which they believe they are academically engaged may also influence their academic burnout level (Romano et al., 2019).

In higher education, academic engagement can be defined as vigour, dedication, and absorption (Schaufeli et al., 2002; Salmela-Aro & Upadyaya, 2014) and is thus a positive, fulfilling state of mind. High energy levels characterise vigour, mental resilience while studying, and willingness to invest in learning. The sense of significance illustrates the dedication and inspiration felt towards education. Absorption, the last dimension of engagement, is characterised by being fully concentrated and happily engrossed in one's academic work. Research studies have found a negative correlation between academic burnout and academic engagement (Schaufeli et al., 2002; Salmela-Aro & Upadyaya, 2014; Cazan, 2015). For example, in a cross-lagged model, academic burnout negatively predicted academic engagement in a school (Salmela-Aro & Upadyaya, 2014).

Academic engagement can predict many long-term positive outcomes, such as completing higher education studies, having better job possibilities,

positive self-perceptions, and well-being (Li & Lerner, 2011; Salmela-Aro & Upadyaya, 2012; Wang & Peck, 2013). Studies have shown that students facing typical burnout symptoms would be incompetent and unwilling to exert academic duties (Richardson et al., 2012; Alshobaili et al., 2021). Again, research on academic engagement is also necessary as studies show that students who are more engaged in their studies will cope better with their course work (Law, 2007), perform better academically, acquire skills and knowledge, and be more persistent in obtaining their educational goals. Engagement can also determine students' passion and motivation for their studies (Stoeber, Childs, Hayward & Feast, 2011).

In the Ghanaian setting, academic resilience, academic engagement and academic burnout have been researched on as a phenomenon. For instance, Abukari, Alhassan and Mohammed (2023) found that student engagement and their academic burnout are inversely correlated at the University of Development Studies in Tamale. Hence, the level of engagement of student has an inverse relationship with their level of academic burnout. Also, Prempeh, Cudjoe, Peprah, Abu and Setordzi (2023) also researched on academic burnout among Ghanaian nursing students and found that student academic burnout was high as a result of an overload of academic activities and extracurricular works. The researchers thus recommended the need to orient students through education on burnout reduction mechanisms which would help them devise strategies for coping with academic stress, subsequent to managing academic burnout.

Notably, studies have also found a correlation between students drop-out and lower academic engagement (Kuh et al., 2008; Rumberger &

Rotermund, 2012; Gasiewski, Eagan, Garcia, Hurtado, & Chang, 2012). Due to the relevance of academic engagement among postgraduate students and their academic resilience in the midst of potential academic burnout, the current study aims to investigate how academic resilience and academic engagement predict academic burnout among postgraduate students at the University of Cape Coast.

Statement of the Problem

University students face several stressors ranging from the demands of their academic coursework to challenges in managing interpersonal relationships (Houghton et al., 2012). Research indicates that academic burnout is a critical psychological issue of students because it is negatively related to psychological health and can be used as a measure of students' wellbeing (Schaufeli, Martinez, Pinto, Salanova, & Bakker, 2002; Breso, Schaufeli, & Salanova, 2011; Kyeong, 2013). In addition, several studies have reported a negative relationship between academic burnout and academic performance (Salmela-Aro, Tolvanen, & Nurmi, 2009; May, Bauer, & Fincham, 2015). The educational context involves numerous activities for students that could cause them to be burned out (Schaufeli & Salanova, 2007).

For example, students are involved in obligatory, structured activities such as attending classes, carrying out projects, or passing exams. They may suffer burnout when they consider themselves unable to cope with this demanding academic workload (Schmidt, Sieverding, Scheiter, & Obergfell, 2015). Thus, chronic stress or burnout syndrome, although initially a job-related problem, is also a concern among students (Schaufeli, Martinez, Marques, Salanova, & Bakker, 2002; Schaufeli & Salanova, 2007; Salanova,

Schaufeli, Martinez, & Bresoo, 2010; Stoeber, Childs, Hayward, & Feast, 2011). In several universities, lecture-related burnout can also be one of the most common reasons students drop-out before getting a degree (Hunter & Devine, 2016; Na'imah & Mudjahid, 2018).

Despite the determination of some university students, these determined students may risk not completing their education due to burnout (Alarcon, Edwards, & Menke, 2011). Accordingly, attending University could become a stressful experience (Salanova et al., 2010; Stallman, 2010; Shin et al., 2011) due to high academic demands; attending classes; respecting deadlines; balancing study, work, and personal life; and financial pressures (Ryan et al., 2010; Hamaideh, 2011). In addition, student burnout and disengagement could be a problem for higher education institutions (Jacobs & Dodd, 2003; Law, 2010; Noushad, 2008; Schaufeli et al., 2002) because they could influence students' level of functioning and performance at the University and can also affect future work-related activities and their entire wellbeing (Rudman & Gustavsson, 2011).

Burnout is associated with poor academic performance, sleep disturbance, risk of severe mental illness or substance use disorder, an increased likelihood of cardiovascular disease, and neglect of physical and psychological health (Wing et al., 2018). In addition, students' burnout may lead to absence from classes, poor motivation for completing coursework, and dropping out of school (Yang, 2004). Consequently, the burnout experienced among students and their unwillingness to complete schoolwork may negatively affect their academic performance and achievement. Research on the relationship between the students' burnout level and their academic

performance have also reported that their burnout has a negative effect on academic achievement (Caballero, Cecilia, Abello, & Palacio, 2007). Thus, the negative and unwanted consequences of burnout make students face a challenge in their academics and this affects their capabilities. Student burnout can also affect students' views, commitment, and general attractiveness, influencing the future enrolment of new students (Neumann, Finaly-Neumann & Reichel, 1990).

Research has shown that when a lot of pressure is exerted on students without adequate supportive mechanisms, they become susceptible to academic burnout (Schaufeli et al., 2002; Yang, 2004). In addition, university students may experience burnout due to learning conditions that demand excessively high levels of effort and do not provide support mechanisms that would facilitate effective coping (Neumann, Finaly-Neumann, & Reichel, 1990). Besides the prevalence of burnout syndrome among university students, considerable research has revealed that burnout is related to perceived workload, stress, examination anxiety, and academic performance (Jacobs & Dodd, 2003).

Also, the concept of resilience has only received significant attention in social sciences research focusing on individuals with adverse life conditions, experiences, or contexts with little focus on academic resilience (Karabiyik, 2020). Notably, Montero-Hernandez, Levin, and Diaz-Castillo (2014) argue that, most academic resilience studies worldwide have concentrated on biased research samples such as students with socio-economic difficulties (Aydın, 2017; Buslig, 2019; Çokluk, Gül, & Kayri, 2016; Yavuz & Kutlu, 2016) and on students with low efficacy (Abukari 2018; Annalakshmi,

2019; Novotny & Kremenkova 2016). There are also studies centred upon minority/less privileged (Britton, 2018; Gross, 2011; Perez-Brena et al., 2018) and on immigrant students (Kumi-Yeboah, 2020; Mbindyo, 2011). However, Martin and Marsh (2006) argue that measuring academic resilience is relevant to all students since poor performance, adversity, challenge, or pressure are everyday experiences in academic life and this is what this current study seeks to do.

In the African context, studies have revealed that academic burnout poses many problems for students (Gauche, 2006; Oyoo et al., 2020; Kaggwa et al., 2021). For instance, Kotzé and Kleynhans (2013) conducted a study among South African University students involving 789 first year students (43% female, 57% male). Using stepwise multiple regression analysis, the study found out that academic burnout was a significant predictor of academic achievement. More importantly, the study revealed that emotional exhaustion was related to higher academic achievement of first year students, which was attributed to long hours of studying.

In Kenya, Winga et al. (2016) investigated the relationship between academic burnout and academic achievement with a sample of 390 students, of which 230 were male and 160 were female. The study revealed that students who failed to score high marks in their academic work experienced more academic pessimism and reduced academic efficiency than high achievers. Additionally, low achievers reported higher school burnout than high achievers.

At the University of Cape Coast, academic burnout is prevalent. Hence, in Ghana, specifically in the Central Region, a study was conducted by

Domaley (2021) at the University of Cape Coast among postgraduate students, and the findings of the study showed that postgraduate students experienced academic burnout. However, the study did not investigate whether student factors such as being resilient and being engaged with their academics had any bearing on the level at which they are burnout. Also, research on burnout in various educational settings is scarce, with most researches conducted in health institutions (Opoku & Apenteng, 2014; Asiedu et al., 2018; Odonkor & Frimpong, 2020). Again, Ghanaian literature on academic burnout among students, especially postgraduate students in schools, is scarce, with such research usually conducted using teachers and not students (Addison & Yankyera, 2015; Boateng, 2020; Ofori, Kyere & Berko, 2020; Osei et al., 2021).

Again, there is paucity of research into how academic resilience and academic engagement predict academic burnout among postgraduate students in Ghana. Most studies have also mainly focused on medical students (Wing et al., 2018; Haile, Senkute, Alemu, Bedane, Kebede, 2019; Kajjimu, Kaggwaa & Bongomin, 2021), and as such, there is scarce research on academic burnout among non-medical students. Thus, the study sought to fill this gap by investigating academic resilience and engagement as predictors of academic burnout among postgraduate students at the University of Cape Coast.

Purpose of the Study

This study investigated academic resilience and academic engagement as predictors of academic burnout among postgraduate students at the University of Cape Coast in Ghana. Specifically, the study sought to;

1. Determine the level of academic resilience among postgraduate students at the University of Cape Coast.
2. Find out the level of academic engagement among postgraduate students at the University of Cape Coast.
3. Identify the level of academic burnout among postgraduate students at the University of Cape Coast.
4. Examine whether academic resilience will predict academic burnout amongst postgraduate students at the University of Cape Coast.
5. Examine whether academic engagement will predict academic burnout amongst postgraduate students at the University of Cape Coast.
6. Ascertain whether there are differences between the academic burnout levels of male and female postgraduate students at the University of Cape Coast.
7. Ascertain whether there are differences in the academic burnout levels amongst postgraduate students at the University of Cape Coast on the basis of Level of Education.

Research Questions

1. What is the level of academic resilience among postgraduate students at the University of Cape Coast?
2. What is the level of academic engagement among postgraduate students at the University of Cape Coast?
3. What is the level of academic burnout among postgraduate students at the University of Cape Coast?

Research Hypotheses

1. $H_0$1: Academic resilience will not predict academic burnout amongst postgraduate students of University of Cape Coast.

   H_A1: Academic resilience will predict academic burnout amongst postgraduate students of University of Cape Coast.

2. $H_0$2: Academic engagement will not predict academic burnout amongst postgraduate students of University of Cape Coast.

   H_A2: Academic engagement will predict academic burnout amongst postgraduate students of University of Cape Coast.

3. $H_0$3: There is no statistically significant difference between academic burnout of male and female postgraduate students of University of Cape Coast.

   H_A3: There is a statistically significant difference between academic burnout of male and female postgraduate students of University of Cape Coast.

4. $H_0$4: There is no statistically significant difference between academic burnout of level 800 and 900 postgraduate students of University of Cape Coast.

   H_A4: There is a statistically significant difference between academic burnout of level 800 and 900 postgraduate students of University of Cape Coast.

Significance of the Study

First and foremost, the outcome of this study would enlighten stakeholders of quality university education, especially the management of the university, university teachers as well as students, that there is growing

recognition of the importance of understanding student engagement and the problem of disengagement in tertiary institutions. As such, the findings of the study would provide insights into the relevance of engagement and enlighten students on the essence of being fully engaged with their academic work.

Moreover, the study would be helpful to the immediate beneficiaries, postgraduate students, as they need to be aware of the prevalence of academic burnout. This is because postgraduate students' study load and demands coupled with thesis writing can be very challenging.

Furthermore, the findings of the study would also reveal students' academic resiliency level, which would enable the management of the University to support low academically resilient students through appropriate counselling measures. Finally, the study would further highlight the essence of academic resilience, which would be helpful to postgraduate students as they will gain in-depth information on the importance of academic resilience in managing academic burnout.

Lastly, the study would add to the existing literature in the area of academic resilience, engagement as well as burnout and serve as a foundation for other future studies. Thus, this research would contribute to the repertoire of existing knowledge and serve as a research basis for future researchers to explore other novel but related concepts.

Delimitations of the Study

The study was delimited to postgraduate students of the University of Cape Coast and not any other category of students. Specifically, the study was delimited to regular students who were pursuing their Masters and Doctorate degrees in their first year from the various Colleges at the University of Cape

Coast. The study was also delimited to concepts such as academic burnout, academic resilience, and academic engagement and not any other concepts. Lastly, the study was delimited to the descriptive survey design as the researcher intended to accurately and systematically describe a population, situation or phenomenon.

Limitations of the study

The self-report nature of the questionnaire predisposed the results to some biases as the validity and reliability of the results obtained were dependent on the accuracy of the responses provided by the respondents. Thus, respondents who provided false information could not be easily traced and removed from the analysis. Again, since data was gathered within the 2021/2022 academic year, the results of this study would not be representative enough overtime.

Operational Definitions of Terms

Academic resilience: Academic resilience is a trait of postgraduate students which makes them likely to achieve good educational outcomes or successfully complete their university education despite challenges.

Academic engagement: Academic engagement is an indicator that combines academic identification and academic participation. Thus, it involves postgraduates' interest in their programme of study, how they maintain a positive attitude towards their programme of study, and their work effort both inside and outside of class, including hours spent on assignments, preparing for thesis, and meeting presentation deadlines.

Academic burnout: Academic burnout refers to an adverse emotional, physical, and mental reaction to a prolonged study among postgraduate

students that results in exhaustion, frustration, lack of motivation, and reduced ability in school.

Organization of the study

The study was organized into five main chapters. Chapter one, which is the introduction, consists the study's background, the problem statement, purpose, specific objectives, research questions, research hypothesis, the significance of the study, delimitations, limitations and organisation of the study. Chapter two focused on the literature review, which consists the theoretical, conceptual, empirical, and conceptual framework. Chapter three outlined the study's research methods, including the research design, study area, population, sampling procedure, data collection instruments, data collection procedures, pre-testing of the instrument, ethical issues, and data processing and analysis. Finally, chapter four consists results and discussions, and chapter five provided the summary, conclusions, recommendations and suggestions for further research.

CHAPTER TWO

LITERATURE REVIEW

The present study investigated how academic resilience and academic engagement predict academic burnout among postgraduate students at the University of Cape Coast. Relevant and related literature regarding the issue under investigation is presented in this section. The literature review comprised the theoretical review, conceptual review, empirical review, and conceptual framework.

Theoretical Review

This section of the literature reviewed three theories that guided the conduct of the study. Four theories that were considered for the study were the Demands-Resources Model, Conservation of Resources theory, the Theory of Student Involvement and the Resilience Theory. The subsequent paragraphs explained these theories and demonstrated how they are related to this study.

Demands-Resources Model by Bakker and Demerouti (2006)

The Demand-resources model initially introduced some explanations for stress **(**Bakker & Demerouti, 2006). However, it later turned to explain the causes of more burnout. The model suggests that two concepts can be addressed regarding burnout: demands and resources (Bakker, Demerouti, & Verbeke, 2004). 'Demands' express the needs related to the (work) one is doing or the (studies) of students. There is a psychological cost (such as burnout) because these requirements require constant effort and create pressure on the worker or student (Wei et al., 2015). Demands are workload or study load, time pressure, relations with clients or colleagues, physical environment, etc. Excess demands can lead to burnout in people, and a lack of

resources can affect one's work or studies. If a student exerts much effort and energy into balancing their studies and work for a long time, they can run out of energy and get emotionally exhausted, reflecting the 'demand' concept in the theory (Demerouti et al., 2001). The 'Resources' concept in the theory, on the other hand, are called protective health factors. Resources are physical and psychological aspects seen as the ability to complete one's task, reducing physiological and psychological costs, and promoting personal growth and development (Demerouti et al., 2001). Resources include positive feedback, awards, control of academics or job, active participation, and principal support. In situations where students have less demand but have sufficient resources, their work engagement and job satisfaction increase (Demerouti et al., 2001).

Studies in literature support the model by showing the positive effect of the resources at work or school on the demands that cause work commitment, performance, and burnout (Bakker & Demerouti, 2008). Lack of social support, especially in the school or workplace, restriction of the use of skills, low-level job or academic control and low level of feedback on performance are reasons leading to burnout. Receiving social support and feedback are essential in reducing the negative effects of demands and burnout (Bakker & Demerouti, 2008). In summary, this model explains that burnout develops in a two-stage process. In the first stage, job demands burden people excessively, leading to emotional exhaustion. Inadequate resources in the second stage make people confront job demands, leading to a complex situation. This then makes people show withdrawal behaviours. The long-term consequence of withdrawal behaviour results in disengagement. Therefore,

this model argues that the interaction between student demands and their resources creates burnout (Demerouti et al., 2001).

According to this model, students face too much demand in the academic environment about the lessons and studies that affect burnout and engagement with the school in the future (Wei et al., 2015). Such situations affect students' engagement level with the school, burnout, and well-being. The model proposes that excessive demands lead to academic burnout in students, but self-efficacy beliefs are essential in improving students' engagement in the school (Salmela-Aro & Upadyaya, 2014). In particular, it is explained that work-related resources are associated with school engagement, whereas demand is more often associated with academic burnout. Based on this, it can be argued that extreme demands increase school burnout, and personal resources influence being engaged in school. In addition, it is stated that academic engagement and burnout can be thought of as two opposite ideas (Salmela-Aro & Upadyaya, 2014). For example, workload and academic pressure lead to energy depletion and stress in the first stage, resulting in burnout. Another process proposed in the model is a motivational process and "resources" that the student can access, resulting in being dedicated to the school. This process ultimately contributes to an increase in the student's life satisfaction. High self-efficacy, social support, and support for engagement are listed as examples of resources. In addition, demands are work-related difficulties during school years, overwork, and prevention of attention (Salmela-Aro & Upadyaya, 2014; Salmela-Aro, 2017).

This theory underpins the study since it mainly focuses on students' burnout. In this context, the researcher asserts that the demand-resource model

helps explain the relationship between academic engagement and academic burnout. Thus, students have 'demands' to satisfy, such as writing tests, preparing for exams, balancing their studies and work or family responsibilities, etc. Therefore, they must ensure that they have the resources, including academic engagement, support from others, and higher self-efficacy, to meet such demands in order to manage the extent to which they experience academic burnout.

Conservation of Resources CoR Theory

The theory of conservation of resources initially introduced some explanations regarding stress and therefore it is among the theories explaining stress. According to this theory, people want to acquire resources and maintain these resources. Stress is a reaction shown to the loss of a possible resource in the environment, especially the loss that may happen in the resources of the person. These resources include objects, conditions, personal characteristics and energies (Bakker & Demerouti, 2008). Under which conditions stress emerges is one of the topics that the theory explains. According to the theory, people have a basic motivation to acquire, maintain and protect what they value. These things can be expressed as resources. The theory of the conservation of resources mentions the existence of four main resource categories. These resources are can be listed as (i) objects (such as house, car), (ii) conditions (such as good marriage, regular job), (iii) personal qualities (social self-confidence, high self- esteem) and (iv) energy (loans, money, and supports).

According to the theory, psychological stress or tension in people emerges when; (i) the resources are threatened, (ii) the resources are lost and

(iii) the owned resources are lost and failure occurs in the acquisition of the new resources (Bakker & Demerouti, 2008). In this context, this theory justifies the study as burnout is likely to occur among students when resources are threatened, lost, or a problem is encountered in acquiring new resources.

Theory of Student Involvement by Astin (1984)

The theory of student involvement was developed by Alexander Astin and published in 1984. Students' involvement is "the quantity and quality of the physical and psychological energy that students invest in the college experience" (Astin, 1984, p.307). This means that the more students are involved in the school's activities, the more they learn and develop academically. When students are highly engaged in the school, they spend more time on campus, studying, and frequently interact with the school faculty and peers. According to Astin (1984), the theory of students' involvement can help institutions design a more effective learning environment. To Astin, involvement involves the student showing serious effort in dedicating their time and attention to a given activity. In addition, different students participate in assigned educational activities with varying degrees of involvement. Finally, students who invest their psychosocial and physical energies into learning tend to perform well academically.

The Theory of Student Involvement purports that how much students invest in their academics determines their learning outcomes, development, and persistence. Astin (1984) describes student involvement as "the amount of physical and psychological energy that students devote to the academic experience" (p. 518). Students who are highly involved or engaged in college are more likely to spend much time studying, actively participating in student

organisations on campus, and frequently interacting with peers and faculty members (Astin, 1984). According to Astin (1984), involvement is related to the concept of student behaviour. He explained, "it is not so much what the individual thinks or feels, but what the individual does and how he or she behaves, that defines and identifies involvement" (p. 521). Astin's theory (1984) suggests that students' effort and energy investment are paramount to producing desired outcomes; students must be active participants in the learning process. For that reason, Astin (1984) encourages educators to focus on "how motivated the student is and how much time and energy the student devotes to the learning process" (p. 522).

Astin (1984) included five underlying assumptions or postulates in his Theory of Student Involvement. First, he suggested that involvement requires an investment of "physical and psychological energy," generally and specifically (p. 519). For example, a student may be physically invested in the campus environment, spending several hours on campus, or psychologically engaged in preparing for an exam. Second, involvement works on a continuum, with different students expending different energy levels. Third, involvement characteristics can be measured qualitatively and quantitatively (Astin, 1984). Therefore, involvement in studying can be measured by the number of hours the student studies and the student's methods of study. Fourth, there is a direct proportion to the benefits of student involvement in quality and quantity. If a student puts forth more effort interacting with a faculty member, that student will receive more benefits. Lastly, a direct relationship exists between the level of student involvement and the effort put

in by an institution to increase the effectiveness of educational practice and policy (Astin, 1984).

Astin's Theory of Student Involvement (1984) is rooted in the concept that a significant factor in college student learning and personal development is students' academic and social engagement. Several studies have provided evidence of a positive relationship between academic engagement and academic resilience (Kuh et al., 2008; Hu, 2011; McLaughlin et al., 2013).

Astin (1984) further defines academic engagement as the complexity of "self-reported traits and behaviours, including the extent to which students work hard at their studies, the number of hours they spend studying, the degree of interest in their courses, and good study habits" (p. 525). Webber, Krylow and Zhang (2013) found that students who were more academically engaged and experienced higher academic achievement were more likely to be resilient in school than their counterparts after their first year. In addition, researchers have found that the amount of time a student devoted to studying, interacting with peers and faculty members, and utilising institutional resources such as tutoring centres or the library, had positive effects on academic outcomes (Astin, 1984).

This theory underpins the study because academically engaged students are more likely to interact with faculty members, participate in peer study groups and collaborative learning, and exhibit behaviours that improve their academic achievement. Thus, they become academically resilient thereby implementing learning strategies and study skills, devoting adequate time to studying and reviewing material, and participating in active learning.

Resilience Theory by Masten (2011)

Masten (2011) defined resilience as "the capacity of an individual to withstand or recover from significant changes that threaten their stability, viability, or development". In 2014, Masten removed "withstand" and changed the definition to "adapt successfully". Hence, Masten (2014) described resilience as "the capacity of an individual to adapt successfully to disturbances that threaten their function, viability, or development" (Masten, 2014). This definition reflects the perspective that individuals do not withstand risk but change to accommodate risk.

Masten indicates that two criteria must be present when it comes to resilience. These include; a measure of positive adaptation or development and the past or current presence of conditions that threaten to disrupt positive transformation (Masten, 2014, p.12). Masten defines positive adaptation or development as meeting developmental tasks and fundamental human adaptation systems. Developmental tasks are the expectations of a given society or culture in a historical context for the behaviour of children in different age periods and situations (e.g., going to school, getting a job, romantic relationships). Fundamental human adaptation systems include attachment relationships and parenting, self-regulatory systems for emotion, arousal and behaviour, etc. (Masten, 2014).

Like other resilience researchers, Masten developed a list of protective factors that operate at the individual, family and community levels (Masten, 2011). Masten states that protective processes are only basic human protective systems (Masten, 2014) and that people who do not show resilience do not have the "basic resources nor the opportunities and experience that nurture the

development of adaptive systems" (Masten, 2014, p.12). Masten further suggests that "resources can theoretically counterbalance high levels of risk to produce a competent outcome" (Masten, 2014, p.13). Despite these extensive lists of protective factors, Masten further indicates there is still "very little understanding of processes underlying protective processes" (Masten, 2014, p.15).

In Masten's theory, risk factors are based on known predictors of adverse outcomes (e.g., those from low socio-economic status, and disadvantaged backgrounds) (Masten, 2011). Masten stated that one cannot define "true" adversity as each person responds differently to similar stressors, and multiple processes influence this response. Masten also suggests that individual differences are sensitive to experience and context, and there is a requirement to understand what wellbeing means within each context. Notably, there are some determinants for conquering adversity in order to become more resilient. They include:

a. **Acceptance**: This refers to tolerating what is perceived to be an undesirable event and the ability to understand its weight and gravity. Acceptance helps to change the way a situation is perceived.

b. **Hardiness**: This involves internal strengths such as cognitive and behavioural flexibility, endurance, control and commitment. Resilience flourishes from the ability to accept the challenge and use active problem-solving techniques when challenged.

c. **Mastery**: This is when an individual facing a problem believes that he or she has a sense of control over the situation or that perhaps they hold the belief

that they are the masters of their outcome. It is a form of coping that facilitates adaptation and a sense of competence.

d. **Hope and Optimism**: This has been said to be an integral component of coping. It is produced through positive memories and interpersonal relationships, facilitating fresh insights and a sense of purpose.

e. **Self-efficacy**: An individual's belief that he or she is both competent and confident in dealing with stressful events is essential. It has been said that higher levels of self-efficacy are related to more effective management of problems.

f. **Sense of coherence**: This is when an individual believes that his or her experiences are manageable and meaningful. It refers to a global perspective and orientation towards life. It is how distressed individuals combine their strengths and shared values to manage tension and stress in a challenging situation.

g. **Resourcefulness**: This refers to being prudent when utilizing positive cognitions to cope effectively through positive thoughts, feelings and behaviours. It also refers to being willing to seek help from others when needed.

This theory underpins the study because resilient students are individuals with a combination of weaknesses and strengths; however, they predominantly hold positive insights, independence, positive interpersonal relationships, initiative and humour despite challenges (Zausniewski et al., 2010). All these positive characteristics help in being able to cope and thrive in the face of adverse life situations. Thus, resilience does not result from the

evasion of obstacles but rather the utilization of resources by students to manage adversities and come out of their academic hassles.

Conceptual Review

This section discusses relevant concepts related to the study of interest. The conceptual review provides information on the various concepts under study. It considers definitional issues and explanations of the study's main variables.

Resilience

Resilience can be a process consisting of positive adaptation when facing obstacles or adversity (Zauszniewski, Bekhet & Suresky, 2010) or a dynamic set of skills utilized when facing a difficult situation, encompassing a range of thoughts (positive outlook), feelings (such as sense of humour) and behaviours (capacity to utilize social support) (Simpson & Jones, 2013). Developmental psychologists have long recognized that among groups believed to be at high risk of failing due to obstacles, some individuals can emerge unscathed by adverse conditions. These individuals are considered to be resilient. However, it is a common misconception that resilience is a trait that some individuals possess and others do not. Kaplan (2005) in studying resilience among individuals labelled resilient individuals as “invulnerable”. This suggests that resilient individuals could achieve success and stability regardless of the severity or number of adverse events they face. However, if the level of adversity experienced is severe enough, resilient individuals might succumb to adverse outcomes (Simpson & Jones, 2013).

Several researchers have defined resilience and characteristics of resilience in students; however, there seems to be no universally accepted

definition of resilience (Bellin & Kovacs, 2006). According to Brown and Westaway (2011), resiliency is the human capacity to deal with, overcome, learn from, and be transformed by adversity. Karatas and Cakar (2011) found that self-esteem and self-efficacy contributed to resiliency. Karatas and Cakar (2011) noted that resilient individuals view problems and challenges as obstacles that can be worked on, changed, and resolved. Also, resilient people are active in problem-solving and develop flexible strategies and skills to solve problems. Khalaf (2014) defines academic resilience as the heightened likelihood of success in school and other life accomplishments despite environmental adversities brought about by early traits, conditions, and experiences. Ellis, Bianchi, Griskevicius and Frankenhuis (2017) define resilience as the ability of individuals to adapt to and overcome factors that place them in jeopardy. Southwick et al. (2014) define resilience as normal development under challenging conditions.

Definitions of resilience vary, but resilience can include a sense of self-efficacy or self-determination that enables an individual to engage in goal-directed and self-regulated behaviour. It can also be considered as competence in the face of significant challenges to achievement or development (Masten, Herbers, Cutuli & Lafavor, 2008). Thus, the construct of resilience consists of two conditions that must be met: the first is exposure to adversity or risk and the second is a positive adaptation to this exposure.

Fostering Resilience

It is essential to understand how schools can foster resilience in students. Effective characteristics of schools that support students include strong leadership, realistic expectations for student achievement, an emphasis

on basic skills, an orderly environment, and frequent and systematic evaluations of students (Hoy, 2012). Rutter (1987) identified four main protective processes or methods that foster resilience. These are:

a. Reducing adverse outcomes by altering the risk or child's exposure to the risk
b. Reducing adverse chain reactions following risk exposure
c. Establishing and maintaining self-esteem and self-efficacy
d. Opening up opportunities to acquire skills and investing in prosocial activities.

Schools can also foster resilience processes among their students through several mediums. For example, schools can reduce adverse outcomes by providing free/reduced meal programs, access to school-based health clinics, clothing and other basic needs, and links to community resources. Schools can further reduce adverse chain reactions following risk exposure by having manageable class, developing mentoring programs, offering additional tutoring or counselling, etc. Schools can also foster resilience in students by setting up classroom environments so that students can experience success and feel a sense of control over aspects of their environment. Finally, schools can provide opportunities for students to acquire skills and engage in prosocial activities by offering a range of extracurricular activities and workshops.

Some researchers argue that the job of enhancing resilience in students lies within the schools (Brooks, 2006; Morrison & Allen, 2007). Teachers and lecturers are in a powerful position and can take advantage of the opportunities they have in their daily encounters to help enhance students' resilience. However, unless management of schools adopt initiatives to help foster

academic resilience among students, this task becomes monumentally tricky for teachers or lecturers to undertake. Brooks (2006) also suggests enhancing resiliency through school policy. Brooks states that school personnel are expected to safeguard students from the risk factors they are exposed to.

In addition, schools have an even greater responsibility to instil and foster a resilient environment for students because of the increasingly high demands placed on them to perform well academically. Brooks (2006) suggests that schools can help foster resilience by (a) teaching children social skills, (b) providing a supportive environment, (c) instilling a desire to succeed academically, (d) providing an environment in which children are active participants in their learning, (e) providing extra support for teachers, (f) developing links and bridging the gaps between families, schools and communities.

Goldstein and Brooks (2007) also provide educators with a tool to help them evaluate the problems that interfere with students' success and develop interventions that would help remediate these problems. They also believe that schools should be the institution responsible for helping develop resilient students and that teaching students how to be resilient should be as much a part of the curriculum as teaching academics. Goldstein and Brooks (2007) suggest the goal of schooling should be to help children develop "a resilient mindset."

Academic Resilience

Researchers have explained resiliency in academically positive outcomes as "academic resilience". This refers to the unexpected educational attainments of students despite vulnerability to challenges or obstacles in the

school (Martin & Marsh, 2006; Peck, Roeser, Zarrett, & Eccles, 2008; Cassidy, 2016; Tudor & Spray, 2017). The academic resilience construct also reflects a student's psychological resilience, which increases the likelihood of educational success, despite adversity brought by academic conditions and experiences (Martin & Marsh, 2006; Cassidy, 2016). Importantly, academically resilient students have the potential to turn around their educational misfortunes by flourishing and thriving despite any adverse school experiences (Tudor & Spray, 2017).

Academic resilience leads to high educational achievement despite risk factors that generally produce low academic performance (Morales & Trotman, 2005). Martin and Marsh (2006) describe academic resilience as a student's ability to deal with chronic adversity that threatens the student's educational processes. Martin and Marsh (2006) found that five factors predict academic resilience: self-efficacy, control, planning, low anxiety, and persistence. Martin and Marsh further proposed the 5 'Cs' model of academic resilience. The C's are confidence (self-efficacy), coordination (planning), control, composure (low anxiety), and commitment (persistence). Additionally, Martin and Marsh assert that academic resilience predicted three educational and psychological outcomes. The outcomes were enjoyment of school, class participation, and general self-esteem.

Cassidy (2016) identified three significant factors in his academic resiliency study. The first factor of academic resilience is 'perseverance', which includes hard work and trying, not giving up, sticking to plans and goals, accepting and utilizing feedback, creative problem solving, and treating adversity as an opportunity to meet challenges. The second factor reflects

'adaptive help-seeking', which includes reflecting on strengths and weaknesses, altering approaches to study, seeking help, support and encouragement, monitoring effort and achievements, and administering rewards and punishments. The last factor is 'negative affect and emotional response', which includes anxiety, catastrophizing, and avoiding adverse emotional reactions. Indeed, these three factors of academic resiliency are significant because they allow at-risk students to learn specific behaviours and actions that cultivate more excellent goal orientation towards academic achievement and improve internal/external protective factors (Cassidy, 2016).

Martin (2002) defines academic resilience as a student's ability to overcome academic setbacks, stress and study pressure associated with the school. Thus, despite adversities, this concept reflects the heightened likelihood of student success and other accomplishments in the academic setting. Lee (2009) on his part describes academic resilience as an individual's recovery from low performance and alienation. Academic resilience also includes high participation in school, strong interpersonal skills, high self-esteem and self-efficacy, high expectations, and autonomy (Karatas & Cakar, 2011). Academic resilience reflects students' ability to deal effectively with setbacks, challenges, and pressure in the school setting over time (Martin & Marsh, 2009). Finally, it should be noted that academic resilience "can be fostered through interventions that enhance students' learning, develop their talents and competencies, and protect them against campus adversities" (Khalaf, 2014, p. 4). Thus, academic resilience has been identified as a protective factor present within the individual student who is successful in the school despite challenges.

Fostering Academic Resilience

Several studies have recommended many ways to foster academic resilience (Cassidy, 2016; Eley & Stallman, 2014; Howe, Smajdor, & Stockl, 2012; McAllister & McKinnon, 2009; Tempski, Martins, & Paro, 2012; Thomas, & Revell, 2016). Professionals who work with students in the school can incorporate the following strategies into their classrooms or programs by fostering academic resiliency among students. First, resilience can be improved within the education context by providing access to protective factors, such as workshops to improve resiliency or life skills. Secondly, school management should give access to caring and learning-centred education environments such as after-school programmes or extracurricular activities. Third, school management should have positive and high expectations, such as encouraging them to see themselves as good students. Forth, school management should provide a solid and supportive social community, such as mentoring programmes that help them build a sense of belonging. Lastly, school management should offer supportive peer relationships such as joining a sport or activity that encourages interaction with other peers. All these strategies can help foster students' academic resilience, which is a coping mechanism (Cassidy, 2016).

Studies suggest that individuals who have experienced adversity can learn or acquire resilient qualities to support further the recommendations on fostering academic resilience. For example, research has stressed on the importance of fostering academic resilience because it allows students to adapt and bounce back from life's challenges (Cassidy, 2015; Eley & Stallman, 2014; Howe, Smajdor, & Stockl, 2012; McAllister & McKinnon, 2009;

Tempski, Martins, & Paro, 2012; Thomas, & Revell, 2016). The fact that academic resilience can be fostered increases the odds of improving life quality, well-being, and the functioning capacity of students who experience adversity. Academic resilience is associated with self-efficacy, self-regulation, and many attributes (Cassidy, 2016). Other protective factors related to academic resilience are engagement and participation in extracurricular activities, educational aspirations, academic self-concept, and supportive or caring adults (Tudor & Spray, 2017).

Individual Protective Factors Linked with Academic Resilience

Literature indicates that many personal characteristics are typically evident among academically successful students, similar to those demonstrated by resilient individuals in other domains of life (Yeager & Dweck, 2012). For example, an internal locus of control, optimism, high self-esteem or a strong self-concept and self-efficacy are vital characteristics exhibited by academically resilient individuals. In a study, Arif (2017) found that the principal difference between resilient and non-resilient students was a strong sense of self-efficacy. The resilient students excelled academically because they believed they could understand the material and information presented in class and do well on homework and tests. This assertion is supported by Martin and Marsh's (2006) study of 402 high school students, in which they found self-efficacy to be "a significant predictor of academic resilience" (p. 277). Thus, planning (effective goal-setting) and persistence in working towards goals positively correlates with academic resilience. However, anxiety and fear of failure are negatively linked with academic resilience.

Malik (2013) also characterizes intrapersonal support as a component of academic resilience which includes "personality characteristics, dispositions, and beliefs that promote academic success regardless of background or current circumstances" (p.139). The resilience model of Malik (2013) includes six intrapersonal factors: self-efficacy, goals orientation, personal responsibility, optimism, internal expectations, and coping ability. Chadwick (2014) identified social competence, problem-solving, autonomy, and a sense of purpose as critical intrapersonal factors in academic resilience. Greater engagement in academic activities has also been identified as a characteristic of academically resilient students (Borman & Overman, 2004). Thus, academic resilience should not be considered as a product of innate characteristics or a life event but rather as a result of continual interactions between individuals and their environment.

Family-Related Protective Factors Linked to Academic Resilience

Park and Holloway (2017) found that parental influence on their child's learning ability was more substantial than social and economic factors such as socio-economic status and class size. According to Park and Holloway (2017), "the home curriculum predicts academic learning twice as well as the socioeconomic status of families." (p. 400). They explained that informed parent-child conversations about daily events; encouragement and discussion of leisure reading; monitoring and analysis of television viewing; expressions of affection; interest in children's academic and personal growth; and delay of immediate gratification to accomplish long-term goals promote children's learning. High parental expectations and clear rules and behavioural expectations also contribute to academic resilience. Without a secure,

supportive relationship with family members, students may not have the confidence to meet challenges, cope with adversity, and may be easily overwhelmed by scholastic demands (Juffer & Van IJzendoorn, 2007). Moreover, strong family ties and parental support helps students to believe that life makes sense and that they have some control over their own lives. Thus, it appears that a supportive relationship with a student may help foster a strong sense of resilience. This, in turn, may provide students with the strength and determination to overcome adverse events.

External Protective Factors Linked to Academic Resilience

Researchers also have begun considering how schools affect students' academic achievement and resiliency. School environment may provide protective factors that safeguard students from school failure. Neal (2017) found that, although individuals with personal solid protective factors are most likely to be academically resilient, schools can also foster academic resilience, even in students lacking personal protective factors. Students must also have the perception that the teacher respects them and cares about their well-being to develop a trusting relationship with them, which will consequently influence their resilience. When this bond is not established or fully developed, students may become less resilient and detached from school and therefore are less likely to succeed in school.

Academic Engagement

Academic engagement or student engagement originated from the study of Astin (1984). However, previous research studies in higher education suggest that different authors have inconsistently conceptualised student engagement using different terminologies to represent the same variable.

These inconsistencies have paved the way for some authors to use student engagement, academic engagement and school engagement interchangeably (Fredricks, Blumenfield & Paris, 2004; Libbey, 2004).

According to Maloshonok (2014), academic engagement as a construct is mainly based on empirical literature that has been researched for the past few years. Different authors invariably use different terminologies to explain their thoughts on academic engagement based on the premise that students participate fully in their academic obligations (Pike & Kuh, 2005). Maloshonok (2014) indicated that engagement highlights the contributing role of the environment in student learning, which influences these students' academic outcomes. Harper and Quaye (2015) also define academic engagement or student engagement as participation in educationally effective practices, both inside and outside the classroom, which lead to a range of measurable outcomes. Learning is co-constructed by the student, the institution, and staff. Academic engagement further involves providing students with the conditions, opportunities and expectations to become involved purposefully with their education.

Academic engagement is also concerned with the policies and the acts which institutions adapt to help encourage students to participate in the programmes and services the institution offers (Clelia, Jose-Javie, Angela, Natalia, Rodrigo & Fabian, 2014). From this view, it can be deduced that institutions can put in place opportunities for learning that will give students the courage to invest their time and effort in participating in activities. Coates (2010) places the student at the focus of academic engagement and emphasizes on student involvement in their duties. From previous literature

and conversations, Trowler (2010) summarized student engagement as being "concerned with the collaborations between the time, effort and other important resources invested by both students and their institution intended to optimize student learning experiences and enhance the outcomes and development of the students as well as the general performance and the reputation of the institution" (p.2).

Fredricks, Reschly, and Christenson (2019) discussed student engagement narratives by asserting that student engagement is a multi-dimensional construct with cognitive, behavioural, affective and emotional dimensions. For instance, Trowler (2010) stated that student attendance, involvement in class discussions and submission of a class assignment on time are examples of positive behavioural engagement, while absenteeism, class boycotts, truancy and deliberate intentions to disrupt class are examples of hostile behavioural engagements. Likewise, students expressing affective reactions due to their enjoyment and interest in their peers, lecturers, staff, institution and activities are examples of positive emotional engagement. At the same time, the feeling of boredom and rejection are associated with hostile emotional engagements. Also, students challenging themselves by investing much time in learning and meeting assignment deadlines are associated with positive cognitive engagement. In contrast, students who are used to submitting their assignments late and sometimes do not offer any extra effort portray negative cognitive engagement tendencies.

Academic engagement can also be a critical factor in students' academic success. Liou and Rotheram-Fuller (2019) argue that students' sense of a close connection with their schools is a vital factor in school achievement.

Students who identify with their schools have an internalized sense of belonging; feel part of the school community and believe that their school constitutes an essential aspect of their own experience. Students who think this way are more likely to value and pursue academic or school-relevant goals and thus are more likely to participate in the classroom. Liou and Rotheram-Fuller (2019) found that academic engagement significantly correlated with achievement test scores. Building strong teacher-student relationships, using students' interests to develop curricula and structured activities, fostering a sense of purpose, and providing alternative programmes to meet individual differences are among factors that help students remain engaged.

School climate is thus a critical factor in reducing academic failure. Hénard and Roseveare (2012) concluded that a climate of high expectations fosters students' internalization of high expectations. More successful schools (those with higher attendance rates and student achievement and lower rates of behavioural problems) share characteristics including an academic emphasis, clear expectations and rules, a high level of student participation, and a variety of alternative resources (e.g., library facilities, extracurricular activities). Providing equal opportunity to learn advanced subject matter content, maximizing learning time, setting high expectations for all students, and tailoring instruction to meet the needs of individual students are also among school-wide practices that promote academic engagement (Novotny, 2011). Williams and Bryan (2013) found that academically engaged students develop strong support networks that assist in their success in and out of school due to their engagement.

Students who are more actively engaged in school earn higher grades, score higher on standardized tests of achievement, and show better personal adjustment to school (Tangney, Baumeister & Boone, 2004). If schools can strengthen academic engagement for students, this would result in improved academic achievement. The student engagement construct allows researchers to give a clearer picture of the complexities and descriptions of student learning experiences at school (Fredericks et al., 2004). The concept of academic engagement assumes that students need relatedness and feelings of connectedness to others, such as their peers, lecturers, staff and the institution as a whole. The feeling of belongingness and autonomy is critical in effectively interacting with lecturers, staff, what is to be learnt, and the institutional environment to achieve mastery (Fredricks et al., 2019).

Dimensions of Academic Engagement

Behavioural Engagement

There are several definitions for behavioural engagement. Some definitions focus on positive conduct, such as following the rules, adhering to classroom norms, and the absence of disruptive behaviour, such as truancy from school and classes or getting into trouble (Appleton, Christenson, & Furlong, 2008; Fredricks & McColskey, 2012). Other definitions also focus on participation in classroom learning and academic activities, including effort, persistence, concentration, attention, asking questions, and contributing to class discussion (Reeve, 2012; Northey et al., 2018). Another definition involves participation in various extra-curricular school activities, such as sports or school governance. Most descriptions do not distinguish between multiple types of behaviour, such as participation in academic and non-

academic activities. Behavioural engagement may also reflect participation using four levels, which range from responding to the teacher's directions to activities that require student initiatives, such as involvement in extracurricular activities and clubs or societies.

Behavioural engagement is thus usually defined as active participation in academic and non-academic school activities. Behavioural and academic engagement are linked to positive student conduct – following the rules in the classroom and a lack of disruptive school behaviours. In addition, displaying academic behaviour, such as making an effort, showing persistence, asking questions, and maintaining concentration, are also indicators of behavioural engagement.

Emotional Engagement

Emotional engagement primarily refers to students' affective reactions and feelings in the classroom, including interest, boredom, happiness, sadness, and anxiety (Zhang, 2017). Some definitions refer to emotional reactions towards the school and the teacher. In contrast, others conceptualise it as identification with school or as belonging (that is, a feeling of being important in the school) and valuing it (that is, an appreciation of success in school outcomes) (Appleton, Christenson, & Furlong, 2008). The definitions of emotional engagement emerged from earlier bodies of work on students' attitudes, such as studies on feelings towards one’s school; like or dislike for the school or teacher; feelings of happiness or sadness in school etc (Fredricks et al., 2004).

While literature outlines distinctions between different types of emotional components, the explanations used in engagement studies are not

detailed. Hence, emotional engagement refers to an array of student emotions and actions related to schools and classrooms. Students' affective reactions (boredom, sadness, and anxiety) are a mechanism of emotional engagement. Researchers have also assessed emotional engagement by measuring student reactions to school and teachers and have found that students who are more emotionally engaged in school show higher academic achievement (Zhang, 2017).

Cognitive Engagement

The definitions of cognitive engagement emerged from two central bodies of literature. One is the psychological investment in learning, a desire to go beyond school requirements and show a preference for a challenge (Garcia-Pastor, 2021). This conceptualisation of cognitive engagement includes flexibility in problem-solving, the choice for hard work, and positive coping in the face of failure. Similar definitions of cognitive engagement encompass attention, concentration, focus, absorption, "head-on", mentally involved, participation, and a willingness to go beyond what is required (Skinner & Pitzer, 2012). Some literature, however, view cognitive engagement as strategic or automated, using meta-cognitive strategies to plan, monitor, and evaluate cognition when accomplishing tasks. In addition, the psychological investment in this definition is quite similar to constructs in other literature, such as motivation to learn, learning goals, and intrinsic motivation (Fredricks et al., 2004). The cognitive engagement construct further encompasses a student's motivation to learn as well as how they value learning and strive for knowledge and mastery in learning situations.

Similarly, students who adopt mastery rather than performance goals focus on learning, understanding, mastering the task, and trying to accomplish something challenging. Intrinsically motivated students prefer a challenge and are persistent when faced with difficulty (Scager, Akkerman, Pilot, & Wubbels, 2014). Each of these concepts emphasises the degree to which students are invested in their academics and value their studies. Fredricks et al. (2004) further highlights cognitive engagement as an effort by the student that is focused on learning and mastering the material.

Cognitive engagement research has stressed on an overall investment in learning (Fredricks, Blumenfeld, & Paris, 2004). Students who show an investment in education have higher grades and test scores and are less likely to be disruptive, truant, or drop out (Klem & Connell, 2004). Dorfner and Zakerzadeh (2021) also define engagement in academic work as a "student's psychological investment in an effort directed toward learning, understanding, and mastering the knowledge, skills, or crafts that the academic work is intended to promote" (p. 12). Cognitive engagement has also been characterized as an investment in learning, wherein students demonstrate a behaviour that goes beyond stated expectations and confronts academic challenges.

However, it is vital that no definition adequately deals with the fundamental qualitative aspects of cognitive engagement (Fredricks et al., 2004). For example, students may be highly strategic and highly invested in learning. However, they may be strategic only when it is necessary to get good grades, not because they are motivated to learn; or they may be encouraged to learn but lack the skills or knowledge to use strategies. Thus, a more accurate

and comprehensive definition would result if scholars integrate the specificity of cognitive processes provided by self-regulation in "learning literature" with descriptions of psychological investment found in "motivational literature".

Academic Engagement Styles

Most studies on academic engagement are directly or indirectly associated with enhancing student learning experiences at school. Coates (2010) explains that when students perceive their lecturers as approachable, report that the campus environment is supportive and responsive and devote much time to learning activities, such students would be referred to as being engaged intensely. Students with an independent engagement style are oriented more towards their academic work than being socially active at school. These students approach their lecturers more often than their colleagues within and outside the lecture room.

According to Coates (2010), students who report collaborative engagement styles are more aligned to the social aspects of university life rather than engaging in individual or cognitive interactions. Students who adopt passive engagement styles rarely participate in only general activities. Trowler (2010) cautioned that the engagement styles by Coates (2010) are transient rather than permanent student traits within an individual that are sustained over a while.

Indicators of Students' Engagement

The National Survey of Student Engagement (NSSE) have benchmarks for measuring students' engagement. According to the National Survey of Student Engagement (2017), these benchmarks include academic challenge, active and collaborative learning, supportive campus environment, student-

peer interaction and enriching educational activities. Elaboration on these benchmarks have been outlined in the subsequent paragraphs.

Academic Challenge

According to the National Survey for Student Engagement (NSSE, 2017), the focus of academic engagement is on high student achievement and also borders on overcoming academic challenges. It focuses on the time a student spends preparing for class and overcoming the challenges in the course that a student offers. The time invested in overcoming every academic challenge has to be high enough to yield desired outcomes. Grave (2011) indicated that the amount of time a student spends studying efficiently affects the student's academic achievement. Academic achievement ultimately reduces academic challenges.

Clelia et al. (2014) suggested that when laid down activities are formally structured, it can help to mentally induce the students to learn and, in turn, make the student take a firm stand in fulfilling the expectation held by the university. They indicated that when students engage in surface-level processing, they have embarked on rote or reproduction learning, while deep-level processing is directed towards comprehending their learning materials. Deep-level learning is akin to the student's ability to engage with what is to be learnt fully. Cohen, Manion and Morrison (2004) believed that students who do surface-level processing often lack feedback from their lecturers and on their progress, which sometimes leads to anxiety and poor academic performance. As such, a positive relationship exists between student engagement and academic achievement aids students to overcome academic challenges.

Learning with Peers

The National Survey for Student Engagement (NSSE, 2017) asserts that collaborative learning helps to enhance the success of the student and helps yield desirable outcomes. Peterson and Miller (2004) opined in their study that the overall quality of experience of the student was significant during learning with peers and collaborative learning. Clelia et al. (2014) supported this by emphasizing that students who are more involved in cooperative learning or learning with peers have a high chance of academic success. They also indicated that, as students interact with their peers, they improve academically. Similarly, Zhao and Kuh (2004) observed that when students learn and collaborate, they develop their willpower to enhance their interpersonal skills.

Experience with Faculty

The experience with faculty benchmark places more emphasis on the amount and the quality of the interaction between the student and the faculty, whether in or out of the classroom. The National Survey for Student Engagement (NSSE, 2017) indicated that interaction with the faculty inside and outside the school helps the student acquire first-hand information. Kuh (2001) found that students' interaction with the faculty has a significant impact on students learning experience in the university in diverse ways. For instance, lecturers provide helpful feedback to students to enhance their understanding of academic issues.

According to Hu, Ching and Chao (2012), student and faculty interaction refers to the quality of communication between the faculty members and the students. Therefore, student experience with faculty is

significant as it contributes to the student's development and quality of learning experience. In a study conducted by Kuh (2003), he maintained that student interaction with faculty should be balanced in nature and time and that when it is too much or too little can lead to a negative impact on the student.

Campus Environment

According to the National Survey for Student Engagement (NSSE, 2017), interactions with academic advisors, student representatives, staff and other administrative staff may significantly and positively affect educational outcome of students. Pascarella and Terenzini (2005) indicate that students' communication with a diverse group of individuals when on campus helps their learning and development. Hu (2011) remarked that when students develop relationships with the university learning community and other individuals who are part of the learning environment, such as the librarian, it will help increase their satisfaction and chances of succeeding in school. Clelia et al. (2014) referred to the campus environment as the favourable environment of the university that helps to add up to the student's academic and social interaction. This favourable environment includes the school library, clinic, counselling unit, sports complex, computer laboratory and recreational centres for healthy lifestyles.

Academic Burnout

Nature and Development of Burnout

Maslach and Leiter (2016) claim that there is no standard definition of burnout. As a concept, "burnout" appeared in the 1970s (Shaufeli, Leiter, & Maslach, 2009, p. 204). Freudenberger in 1974 was one of the first researchers to define burnout syndrome, and he viewed burnout as a "psychiatric and

physical breakdown" (Weber & Jaekel-Reinhard, 2000, p. 512). Maslach and Leiter (2008) then introduced the Maslach Burnout Inventory – the primary and the most commonly used instrument for measuring burnout. When Maslach and Freudenberger's works were published, many other scholars became interested in the burnout syndrome, and researchers started investigating this concept.

The measurements of burnout and its definitions vary due to different theoretical frameworks and the audience for which research is being done. It is necessary to mention that initially, scholars started researching burnout syndrome in working individuals, viewing burnout as a work-related concept. That is why Maslach and Jackson defined it as an outcome of chronic stress that appears in the work setting (as cited in Weber & Jaekel-Reinhard, 2000, p. 512).

Burnout as a phenomenon does not occur overnight, but it is a slow process that accompanies the exhaustion of an individual's resources without any resource gain. Notably, not all individuals function similarly in the phase of the burnout syndrome. Gorgievski and Hobfoll (2008) assert that burnout depends on the individual's resource capacity and reserve, e.g., resilience. Therefore, individuals with more considerable resource reserve or those from resource-rich environments tend to be more successful at keeping their resources and searching for new chances to manage burnout. As such, different students will cope differently with burnout symptoms.

The Dimensions and Phases of the burnout process

According to Maslach (2003), burnout is a syndrome described in three dimensions: exhaustion, cynicism and reduced efficacy (Makikangas &

Kinnunnen, 2016, p. 12). Exhaustion happens when work overload drains the emotional resources of individuals, leaving them to experience tiredness and fatigue. Cynicism also occurs through the development of a negative attitude towards work and an individual's attempt to distance themselves from their task. Reduced professional efficacy occurs when individuals' productivity and capacity to do work is lost, and they tend to see their performance as ineffective (Makikangas & Kinnunnen, 2016, p. 13). Burnout does not simply occur but develops stage by stage (Hallsten, 2005; Kaschka, Korczak & Broich, 2011).

Hallsten points out that, burnout is the latest phase in the process of "burning out" (Hallsten, 2005, p. 518). The first phase of burning out is so-called "absorbing commitment", which represents severe involvement and engagement with anxiety and worry. The next possible phase is "frustrated strivings", during which one develops stress coping strategies. The last phase is burnout, when stress coping strategies fail, and an individual's functional capacity is diminished. Hallsten argues that one goes all the way to the "burnout" phase, given that they experience constant uncontrolled stress (Hallsten, 2005, p. 518).

Academic Burnout

Academic burnout is an extension of the Multidimensional Theory of Professional Burnout set forward by Maslach (Schaufeli et al., 2002). It refers to a syndrome that affects students' academic life and educational endeavours (Maslach & Jackson, 1981). The definition of academic burnout includes a three-dimensional structure that aligns with the definitional structure attributed to professional burnout: feeling exhausted due to academic demands, being

cynical and becoming detached toward academic studies, and experiencing feelings of incompetence (Schaufeli et al., 2002). Academic burnout is one of the most important educational research themes today, mainly because its prevalence has increased over the years (Moneta, 2011; Kaur et al., 2020). An analysis of academic burnout can be the first step to understanding the behaviour and academic performance of university students, as well as understanding their level of commitment to learning, their level of participation in academics and how it can affect enthusiasm in their studies (Neumann, Finaly-Neumann, & Reichel, 1990).

According to Merino-Soto and Fernández-Arata (2017), academic burnout consists of the feeling of cognitive and emotional exhaustion caused by the high demands of a university. Notably, university students must attend classes, perform assignments, exams and presentations, actively participate in the classroom, and interact with people and the educational establishment. Salmela-Aro (2017) also describes academic burnout in school in terms of three components: emotional exhaustion, cynicism towards studying and feeling of inadequacy as a student.

Salmela-Aro et al. (2009) also give a deeper insight into what academic burnout means in the school context. Salmela-Aro et al. (2009) further share that emotional exhaustion happens due to school demands, such as deadlines, overload with tasks, and different types of pressure and stress related to school and studying. The dimension of cynicism develops not in general but towards school and everything related to it. Consequently, individuals can experience the feeling of inadequacy during the course of their

studies. Salmela-Aro et al. (2009) reported that the dimensions of academic burnout are positively correlated.

Galbraith and Merrill (2015) assert that several studies have been conducted on academic burnout. Pishghadam and Sahebjam (2012) outlined that burnout syndrome in the educational sphere is considered as a critical concept. To this end, Chen (2021) also speaks about individual student factors of academic burnout as involving lack of self-regulation, which leads to demotivation in studying and further damages students' enthusiasm for learning (p.133). When students lose confidence in themselves, they stop trying to get better marks, and as a result, their academic achievement suffers (Galbraith & Merrill, 2015). Chen, Jin, Yin and Li (2013) also point out that students with better marks have a lower burnout level than their peers.

Some researchers draw a connection between job burnout and school-related burnout. Lin and Huang (2014) argued that students are prone to burnout, just as workers do since their study process is structured and similar to work. Likewise, job and academic burnout consist of identical phases: school-related emotional exhaustion, cynicism and feeling of inadequacy as a student. Thus, school-related emotional exhaustion can be defined as the feeling of tension, anxiety and chronic fatigue caused by overload with schoolwork (Salmela-Aro et al., 2009).

School-related cynicism as another dimension is expressed through an aloof attitude toward everything related to schoolwork and a loss of interest in one's academic work and devaluing the meaning of studying (Salmela-Aro et al., 2009). Finally, a feeling of inadequacy as the last dimension of academic burnout is manifested through a sense of reduced competence, lack of progress

in schoolwork and lack of success in academic achievement (Salmela-Aro et al., 2009). Academic burnout has outcomes such as; skipping classes, low motivation to complete required assignments, and dropout, among others (Lin & Huang, 2014, p. 78).

In the academic context, burnout also reflects a three-dimensional reaction to academic stress characterised by; feelings of exhaustion from school-related demands; cynical (or indifferent) attitude toward school and the learning process as well as; feelings of inadequacy as a student (Schaufeli et al., 2002; Salmela-Aro et al., 2009). In the context of burnout, exhaustion represents the dimension of individual stress (Maslach, 2003). It is related to the pressure at school, especially constant fatigue caused by excessive workload (Salmela-Aro et al., 2009) and lack of emotional and physical resources (Maslach, 2003).

Emotional tiredness, cynicism, and academic inefficiency have mostly been identified as sub-categories of academic burnout. Academic burnout may be characterised in a variety of ways. Still, the most commonly used description is by Schaufeli, Martinez, Pinto, Salanova, and Bakker (2002). They defined academic burnout as tiredness caused by academic expectations, accompanied by indifferent attitudes and pessimistic views about assignments. Academic pressure put on students due to academic's competitive nature and the urge to achieve causes more emotional tiredness.

In addition, cynicism occurs when students are dissatisfied or irritated when they do not achieve their goals. It is conceptualised as indifference toward losing interest and devaluing schoolwork (Salmela-Aro et al., 2009). Finally, feelings of inadequacy represent a dimension of self-evaluation

(Maslach, 2003) and refer to experiencing reduced academic competence and achievement (Salmela-Aro et al., 2009).

Factors responsible for Academic Burnout

Academic burnout results from students' excessive burnout-related influencing factors present during their academics (Watson, Deary, Thompson, & Li, 2008). Burnout characterizes the tension experienced between demands and available resources to meet those demands (Watson, Deary, Thompson, & Li, 2008). Similar to professionals' experiences with job-related stressors, which include managing large caseloads, low pay, unclear roles, and having few opportunities for career advancement, students' source of burnout originates from fulfilling their academic demands. Academic demands, thus, refer to the environmental stimuli that require students' effort, attention, and the mobilization of resources to meet educational requirements (Watson, Deary, Thompson, & Li, 2008; Ling & Huang, 2014; O'Neill et al., 2019).

Academic burnout coexists with conflicting environmental stimuli or stressors that generate tension between demands and available resources to manage educational responsibilities and social relationships (O'Neill et al., 2019; Lin & Huang, 2014). In addition to the academic background, studies such as those by Jordani, Zucoloto, Bonafé, Maroco, and Campos (2012), among many others, point to the fact that the pressures related to the financing of higher education can also cause burnout among university students. Again, poor school performance and poor relationships with colleagues and lecturers are some of the factors that make university students more vulnerable to the development of academic burnout syndrome.

There are some risk factors about the aspects of the university which may also hinder the students' exemplary academic performance and positively correlate with higher levels of burnout. Among them are the difficulties with library and reprography services; the absence of logistical support and infrastructure, namely, classrooms with scarce computer equipment, improper ventilation, poor lighting or inappropriate furniture; or poor transport conditions for travelling to the school (Caballero, Esteve, & Gutierréz, 2015). Additionally, the lack of financial support to study, in particular, the difficulty in obtaining scholarships provided or channelled by the university; the insufficient empathy and efficiency of administrative staff; organizational inflexibility; the difficulty in collaborating in decision-making; and the absence of an academic association, are other difficulties that arise for students (Caballero, Esteve, & Gutierréz, 2015).

Certain peculiarities of the student's work may be controllable or subject to the intervention of the higher education institution. Some of them are the overload of disciplines and increased academic demands; the frequent absence of explanations and little or no clarifications of complex educational topics. Also, demanding and absentee lecturers; student's lack of control or autonomy over their work; inappropriate distribution of the workload throughout the semester; and carrying out training activities and curricular internships at the same time as classes take place all cause academic burnout (Caballero, Esteve, & Gutierréz, 2015).

It is important to note that, when analyzing students' academic burnout factors, one must consider their environment. Regarding the social risk factors in the academic field, which may precede the burnout syndrome, empirical

investigations emphasize the following: poor relations between students and teachers, absence of feedback from teachers, reduced solidarity and companionship, competitiveness and conflicts with colleagues, non-participation in cultural or recreational activities, and recreational spaces that are difficult to access. In addition, interpersonal factors also play a crucial role, namely the absence of family support and the absence of friendships (Caballero, Esteve, & Gutierréz, 2015).

Caballero, Esteve, and Gutierréz (2015) point out other aspects as more viable to predict burnout cases in university students, namely, sex (given that women are more effective and men more cynical about their training), certain traits of personality (anxiety, stiffness, perfectionism, and low levels of self-efficacy; self-efficacy being an individual's belief or confidence in their ability to perform a particular task or solve a specific problem and certain methods of measuring student academic performance, such as skill deficits, habits, and study methods (for example, preparing for tests/exams). In addition, feeling anxious during exams, having poor social and cognitive abilities, low prospects for academic success, and less motivation or satisfaction with one's studies are other aspects that, according to these authors, may precede the condition of academic burnout.

According to Zhang, Gan, and Cham (2007), identifying academic burnout may involve assessing the longevity of each student's studies and recognizing certain attitudes guided by cynicism and incompetence. In addition, some studies, such as those by Alarcon, Eschleman & Bowling (2009). and Halbesleben (2006), prove that people's personality, social support and coping strategies are variables that allow for the prediction of

academic burnout. Notably, three dimensions mainly characterize academic burnout: emotional exhaustion, disbelief, and low professional effectiveness (Maroco, & Tecedeiro, 2009). University students are likely to suffer from emotional exhaustion due to fatigue in their studies. On the other hand, disbelief is present when a cynical and distant attitude towards studies is developed, and low professional effectiveness arises when students cultivate the idea that they are incompetent (Jordani, Zucoloto, Bonafé, Maroco, & Campos, 2012).

Student Background Factors as an inducer of Academic Burnout

There is scientific evidence that certain student background factors (gender, relationships with parents, year of study, area of origin, etc.) influence the development of academic burnout in school settings. First, studies collectively suggest that girls are more likely to burn out than boys (Backović, Ilić Živojinović, Maksimović & Maksimović, 2012; Salmela-Aro et al., 2008). This could be explained by the fact that female students experience more stress in studying, examinations, and communication with teachers and examiners (Backović et al., 2012).

Second, students' good relationships with their parents also seem to contribute to their positive attitude toward schoolwork and buffer any negative influence of peers concerning academics. According to Marion, Laursen, Kiuru, Nurmi, and Salmela-Aro (2014), if students have problematic relationships with their parents, parents may lose influence over their ward's academic life because the ward will not value any parental opinion about education. Consequently, they will listen to their peers and try to blend in with their views and attitudes. (Marion et al., 2014). Furthermore, Marion et al.

(2014) found that friends with a high level of academic burnout create a risk for students whose academic burnout level is lower. Therefore, it seems plausible to assume that if students do not have strong relationships with their parents and get along with peers who have a negative attitude towards schoolwork, they may be prone to the development of academic burnout.

Third, the year of academic study may be related to academic burnout. However, studies analyzing the influence of year of study on academic burnout have yielded contradictory findings. Lin and Huang (2014) investigated this aspect regarding the university's 4-year study process and they found no significant difference in burnout levels by year of study. Conversely, Li et al. (2021) found a difference in the burnout level between first- and second-year students (sophomore scoring higher on the scale of sadness). The authors assumed that first-year students were new to university life and got more support from family and school than sophomores who were accustomed to the school.

Lastly, peer groups have a direct influence on the way individuals burn out. In their longitudinal study of ninth graders, Kiuru, Aunola, Nurmi, Leskinen and Salmela-Aro (2008) came to the conclusions that; individuals with peers with a certain level of burnout syndrome would burn out as well, following the same trajectory. Thus, it can be derived that if a student with an excellent academic attitude and motivation ends up in a peer group with a cynical position towards studying, sooner or later, this student will also start experiencing burnout. The researchers explain this through the fact that peers communicate with each other, sharing their negative school experiences and shaping their attitudes towards school (Kiuru et al., 2008). Another scenario is

also possible: peer groups with good academic engagement is very important. Hence, if a burned-out individual gets into such a peer group, his stress related to studying is relieved, and his cynical attitude towards academic achievement slightly changes for good. Kiuru et al. (2008) concluded that such peer groups promoted academic achievement and engagement with studies and alleviated distress related to study demands.

School-related Factors as an inducer of Academic Burnout

Research findings also show that school-related factors (such as academic performance, teacher support, class atmosphere, and course load) may also contribute to academic burnout in the school setting. Thus, students with high academic performance tend to burn out less than those with low GPAs (Salmela-Aro et al., 2008). Furthermore, Shaufeli, Martinez, Marques Pinto, Salanova and Bakker (2002) also add that academic performance is positively related to intellectual engagement. Moreover, researchers discovered that GPA played a significant role in students developing the feeling of inadequacy as a student (Bask & Salmela-Aro, 2012). This could probably happen because of many academic failures evidenced by a low GPA. In this case, the student feels useless academically, and his or her self-esteem suffers considerably.

Course load has also been found to contribute to academic burnout in school settings. Salmela-Aro and Upadyaya (2014) indicate that school-related demands (e.g. overload with academic tasks) could trigger burnout symptoms in students. The researchers explain that school-related needs require a lot of effort from students to achieve their educational goals. When an individual spends their inner resources on school-related demands, they experience

strain, and the exhaustion of internal resources lead to poor goal accomplishment, feeling of failure and dissatisfaction. In turn, the latter may lead to depression and withdrawal behaviour in students (Salmela-Aro & Upadyaya, 2014).

Yang (2004) claimed that school-related overload was strongly associated with academic burnout. School-related overload happens when students realize that they have too many academic tasks to accomplish in a limited time. Yang (2004) noticed that school-related overload is the most significant stress factor for students, thus directly affecting academic burnout. Kiuru, Aunola, Nurmi, Leskinen and Salmela-Aro (2008) argued that academic overload at school may be the antecedent of burnout since it may lead to academic failure, and stress, and affect self-esteem negatively.

According to several studies, lack of social support in school and lack of positive motivation from teachers (teacher support) contribute to the development of school burnout. For example, Salmela-Aro et al. (2008) claimed that when students get supported by school teachers and administrators, they gain more confidence in their academic life, reducing academic burnout levels. Also, positive motivation from teachers serves as a buffer against adverse psychological effects for students, such as stress, exhaustion, and diminished intellectual accomplishment at school (Salmela-Aro et al., 2008). Furthermore, the researchers add that when individuals realise they are getting social support from those around them, it improves their mental and physical health. Therefore, lecturers should encourage students to enhance their resilience thereby reducing their academic burnout. The researchers also asserted that social support could play a significant role

in coping with academic burnout because it alleviates stress from the educational environment.

A hostile class atmosphere is also positively related to the development of academic burnout. Reyes, Brackett, Rivers, White, and Salovey (2012) state that a positive class climate promotes academic engagement and learning (the opposite of academic burnout. A hostile class atmosphere is an additional stressful factor in academic life. Bullying or any other negative experience in the class may also influence students' self-esteem and self-perception.

Salmela-Aro et al. (2008) assert that classmates with a high level of burnout influence their peers to have a similar cynical attitude towards the studying process and this triggers the development of their classmates' academic burnout. On the other hand, classrooms with positive atmosphere help to prevent students from developing burnout. This may be explained by the fact that acceptance, emotional warmth, and teacher consideration of students' emotional and academic needs will promote trusting relationships and a perception of social support in studying (Reyes et al., 2012). Consequently, social support reduces burnout and protects students from the feeling of inadequacy, exhaustion and cynicism towards school.

Consequences of Academic Burnout

Literature points out that academic burnout has its effects on university students. In an attempt to respond to increasingly intense academic and social demands, such as, meeting new challenges, facing new responsibilities, adapting to unique circumstances and increasing work demands (Pluut, Curşeu, & Ilies, 2015), students are more susceptible to syndromes such as academic burnout and to all the personal and social consequences that they can

experience in their lives (Fariborz, Hadi, & Ali, 2019). As Lingard, Yip, Rowlinson and Kvan (2007) point out, academic burnout can make it difficult for higher education students or expected future professionals, to graduate. It may even affect the way they will exercise their professions or even lead to total failure concerning finishing their cycle of studies and, later, entering the world of work.

According to some authors, burnout syndrome is associated with poor cognitive performance (Sandström, Rhodin, Lundberg, Olsson, & Nyberg, 2005), reduced academic achievement or dropping out of the university (Dyrbye et al., 2010), and also to depressive symptoms (Ahola, Hakanen, Perhoniemi, & Mutanen, 2014) and even suicidal thoughts (Dyrbye et al., 2010). As such. if burnout causes low productivity and less student motivation, it is negatively related to the performance of these same students. Hence, students who suffer from burnout are more likely to manifest anger, difficulties in overcoming obstacles, and sadness.

On the other hand, university students involved in their study cycle in a relaxed and positive way have a better academic performance (Schaufeli et al., 2002), showing themselves to be energetic, happy and, consequently, more successful in their learning path. However, according to Salvagioni et al. (2017), several studies still prove that burnout has several effects, which can be severe, on the well-being and health of individuals. Burnout syndrome appears to be a considerable predictor of various illnesses and health disorders such as hypercholesterolemia, type 2 diabetes, obesity, coronary heart disease, cardiovascular disorders, musculoskeletal pain, prolonged fatigue, headaches, insomnia, gastrointestinal problems, breathing problems, and psychological

changes, such as depression or mental disorders, among others (Salvagioni et al., 2017).

According to Salvagioni et al. (2017), there is also a link between academic burnout and the adoption of unhealthy lifestyle habits, for example, in the increase in alcohol consumption and inactivity. Excessive academic burden can have severe consequences for the physical and mental health of the student, who may not yet have an appropriate psychological structure to respond adequately (Salvagioni et al., 2017). Thus, feelings of incapacity and incompetence on the part of the students may arise not only concerning teachers and colleagues but also concerning their studies (Maroco & Tecedeiro, 2009).

Empirical evidence congruently emphasizes the phenomenal consequences of academic burnout on students' academic life (Yang, 2004). Academic burnout affects academic achievement, which depends on good scholastic performance and learning outcomes (Duru & Balkis, 2014). Academic achievement is negatively associated with the dimensions of academic burnout such as feeling emotionally exhausted, having cynicism and being detached and incompetent (Duru & Balkis, 2014). Duru and Balkis further suggest that burnout involves the progressive effect of emotional exhaustion, indifference, and low accomplishments on students' performance and overall academic achievement. Accordingly, Duru and Balkis assert that emotional exhaustion is an early warning symptom and an indicator of poor academic performance and students' inadequate self-sufficiency feelings.

Salmela Aro et al. (2009) also assert that academic burnout leads to depressive symptoms. They conducted a 3-year longitudinal study among

students ageing from 15 to 19. The study aimed to explore the cross-lagged relationship between school burnout and depression. The study findings showed a reciprocal relationship between the two variables and formed a cyclic process. First depressive symptoms led to school burnout development, manifested through exhaustion, feeling of inadequacy and cynicism that again led to depression. Thus, the analysis showed that school burnout predicts depressive symptoms (Salmela-Aro et al., 2009). Such findings outline the importance of exploring academic burnout and possible ways to prevent it since it leads to depression among students.

Furthermore, other researchers have suggested that school burnout leads not only to depression but also school dropout. Hence, Bask and Salmela-Aro (2012), in their research, worked with students to understand the relationship between school burnout and school dropout. To measure school burnout, they used School Burnout Inventory. The analysis of the results showed that emotional exhaustion was not related to school dropout; however, cynicism was. This can be explained by the fact that individuals might consider feeling inadequate and emotionally exhausted as temporary. Cynicism, on the contrary, is an active position that a student holds and manifests in school society by leaving school (Bask & Salmela-Aro, 2012).

Empirical Review

This section deals with empirical studies. Thus, this section deals with related studies conducted by other researchers in line with the objectives of this study.

Level of Academic resilience

Singh (2021) conducted a study on students' academic resilience levels. The researcher intended to study critical resilience tactics international students used to overcome academic hurdles, contributing to the literature on international student development. To do this, the researcher used a qualitative technique that included 33 semi-structured interviews with postgraduate international students that were then thematically evaluated. Semi-structured interviews were undertaken with 12 female and 21 male students from one famous Malaysian research institution. The students willingly agreed to be interviewed. The use of pseudonyms and de-identification of the university that the participants attended ensured confidentiality and anonymity. There were 23 PhD students and 10 Master's students in attendance.

According to the findings of this study, postgraduate students exhibited remarkable/high academic resilience and were talented, dedicated, diligent, autonomous, highly driven, and mature. Respondents demonstrated a high level of strength, allowing them to overcome challenges and attain academic achievement in Malaysia. Furthermore, the findings showed that the students gained resilience techniques through group projects, classroom settings, and accessing university and personal support services. According to the researcher, understanding the resilience strategies of postgraduate international students in Malaysia has critical implications for all universities because it influences how they develop guidelines to promote international students' resilience strategies and help them cope with academic adversity and difficulties.

Olodude, Anuodo and Owoeye (2020) also studied academic resilience in Nigeria. Their study investigated the level of academic resilience among postgraduate students of Obafemi Awolowo University, Ile-Ife and examined the extent to which postgraduate students' self-efficacy could determine their academic resilience. The study adopted a descriptive survey research design. The population of the study comprised all postgraduate students of Obafemi Awolowo University, Ile-Ife, Osun State. The sample consisted of 581 postgraduate students who were selected using the multistage sampling procedure. Two research instruments: Academic Resilience Scale (ARS) and General Self efficacy (GSE) were used to elicit information from the students. Percentages and linear regression were used to analyse the data. The results showed that 22.9%, 62.8%, 14.3% of postgraduate students of Obafemi Awolowo University demonstrated low, moderate, and high levels of academic resilience respectively. The results also showed that self-efficacy significantly influenced academic resilience of postgraduate students at (β = 0.244, F= 34.73, $p<0.05$). The study concluded that self-efficacy was capable of enhancing academic resilience of postgraduate students in Obafemi Awolowo University, Ile-Ife.

Hwang and Shin (2018) also measured students' academic resilience levels. The researchers wanted to know nursing students' qualities regarding academic resilience and what they are like. A cross-sectional design was adopted in this investigation. The target population was three South Korean institutions, and the researchers recruited a convenience sample of 254 nursing students. Self-reported questionnaires were used to measure academic resilience, general features, clinical practice stress, clinical practice

satisfaction, and social-affective competence. Descriptive statistics, the chi-squared test, and analysis of variance with Tukey's post hoc test were used to examine the acquired data. The findings demonstrated that nursing students had a high level of academic resilience. The average score for academic resilience was 3.79. In addition, a higher number of respondents with high levels of academic resilience reported solid interpersonal relationships (p =.001), high academic grades (p =.001), a role model (p =.033), and increased satisfaction with their principal (p =.001). According to the study, students with solid academic resilience were more likely to complete their studies and benefited from programs that improved their social-affective competence.

In another study, Erdogan, Ozdogan, and Erdogan (2015) explored students' academic resilience levels. The study aimed to determine the level of academic resilience among university students and its relationship to specific characteristics (gender and faculty). The findings demonstrated that students' resilience levels were higher than the norm (M = 187, SD = 30.57, Range = 50-250), indicating that they had more academic resilience. The researchers suggested training programmes that promoted resilience development should be created and implemented in other colleges. Again, the researchers argued that psychological treatments might be distributed and made widely accessible to college students.

Abubakar et al. (2021) also investigated into the academic resiliency of students. This was a cross-sectional study conducted among undergraduate pharmacy students in a public university in Malaysia using an adapted and pretested 16-item academic pharmacy resilience scale (APRS-16). A total of 247 students completed the survey (response rate was 55.6%). Overall, the

students did not have a high academic resilience score (median: 59; interquartile range [IQR]: 37 – 80). Thus, the students had low to moderate academic resilience. Academic resilience also varied based on gender and year of study, and it was significantly associated with academic performance.

The level of Academic Engagement

Delfino (2019) studied students' levels of academic engagement. The study assessed the level of student involvement at Partido State University and examined the elements that influenced student engagement. It also looked into the relationship between student involvement and academic success. The descriptive correlational approach was utilized in the investigation. To collect data, a teacher-created questionnaire was employed. The respondents' academic achievement was determined using the general weighted average across two semesters. 305 students from the College of Education participated in the study. The data were treated using mean and ranking, Pearson moment correlation, and multiple regression. The study found that student participation in behavioural, emotional, and cognitive activities was high, with a mean of 2.84. The respondents' academic performance was outstanding (GWA=1.83). The result of the study also revealed that teacher (r=.125, p=.029), school (r=.143, p=.013), and family factors (r=.106, p=.028) were positively related to student engagement.

In contrast, the Multiple Linear Regression analysis revealed a relatively low percentage of variance (1.8%), but the factors were significant predictors of student engagement F (3,301) = 2.905. Furthermore, it was shown that students' behavioural, emotional, and cognitive involvement were strongly connected with their academic success. The study suggested that

professors, schools, and parents work together to give additional possibilities for kids to enhance their university engagement.

Kusurkar et al. (2021) also studied academic resilience. Using a self-determination theory framework, the researchers investigated burnout and engagement among PhD students in medicine, and their association with motivation, work-life balance and satisfaction or frustration of their basic psychological needs. This cross-sectional study was conducted among PhD students at a university medical centre ($n = 990$) using an electronic survey on background characteristics and validated burnout, engagement, motivation and basic psychological needs questionnaires. Cluster analysis was performed on the burnout subscale scores to find subgroups within the sample which had similar profiles on burnout. Structural equation modelling was conducted on a hypothesized model of frustration of basic psychological needs and burnout. The response rate was 47% ($n = 464$). The researchers found that students had low academic engagement scores. It was concluded that low engagement among students caused high academic burnout levels.

Essiam (2019) explored students' academic engagement. The study looked at the elements that drove student involvement and how those aspects affected the academic achievement of students in Ghanaian higher education. A sample of 449 students from levels 200, 300, and 400 of the University of Professional Studies participated in the study. The data were analyzed using descriptive and inferential statistics. Student learning experience (=.185, p.<05), student experience with faculty (= -.133, p.<05), academic challenge (=.107, p.<05), lecturer feedback (=.129, p.<05), and learning with peers were shown to be significant predictors of student involvement.

In contrast, the campus environment (= -.057, p.<05) did not affect student involvement. Student participation had a substantial impact on their GPA (=.298, t (448) = 6.573, p<.05). Students took part in activities that required them to study to satisfy the expectations of their lecturers (Academic challenge, Mean=3.861, SD=.665). Students ranked their interactions with professors as the least important facet of the student engagement measure (Mean= 3.293, SD=.670). Academic performance was favourably and significantly impacted by student participation. Although the majority of students did not participate in entrepreneurial activities (Mean=2.605, SD=.884), the results showed that students who participated in entrepreneurial activities were less likely to perform well academically (r= -.182, p<.05).

According to the findings of the study, student involvement considerably impacted the academic achievement of students in higher education in Ghana. The research advocated encouraging students to create peer-counselling groups to orient students toward positive behaviours that might help them thrive academically while lowering the inclinations of negative peer influences. The study also suggested that lecturers, faculty officials, and university personnel get ongoing training to actively show care and attention to students to foster the trust essential for involvement. Similarly, students should be encouraged to meet with their course advisers at least once a semester to discuss their academic progress.

Shaari et al. (2014) in another study investigated into academic engagement of students. The study aimed to identify the relationship between lecturers' teaching style and students' academic engagement in a university in Malaysia. A sample of 266 students participated in the study. In order to

determine the dimensions of the teaching style of lecturers and students' engagement level, the descriptive statistics based on percentages, means and standard deviations were used. As for the lecturers' teaching styles, majority of the lecturers used personal model followed by expert style, while delegator style had the lowest mean. Majority of the respondents were found to possess some level of academic engagement. The results also showed that there was a significant but moderate relationship between the teaching style of lecturers with academic engagement of students.

Finally, Hartono, Umamah, and Sumarno (2019) researched into academic engagement among students. The research sample consisted of 354 students majoring in Social Sciences from several State Senior High Schools in Jember. Two-way Multivariate Analysis of Variance was used to analyze the data (MANOVA). There was a substantial difference in student involvement levels depending on gender (0.05> 0,000) and grade (0.05> 0,000), according to the data. Female students scored better on student involvement (mean = 3.66) than male classmates (mean = 3.46). The average level of student participation varied between schools (mean = 3.71), (mean = 3.53), and (mean = 3.43). To attain historical learning goals, researchers advised educators to perform proper learning planning by paying attention to variances in student characteristics. The researchers also urged that others should investigate the variables that cause female students and students at different institutions to have a higher degree of student involvement.

Level of Academic Burnout

Kristanto, Chen, and Thoo (2016) researched academic burnout among university students. The study looked at the frequency of academic burnout

and the link between academic burnout and eating disorders among Monash University students. A total of 132 people were recruited for the research using advertisements. They were asked to complete three questionnaires: the Demographic Questionnaire, the Maslach Burnout Inventory – Student Survey (MBI-SS), and the Three-Factor Eating Questionnaire-Revised 18-item (TFEQ-18). In addition, anthropometric measures such as weight, height, BMI, body fat percentage, and waist circumference were also obtained. All data were obtained at the start of the study and after 6–8 weeks. Stata version 13 was used to run ANOVA, Kruskal–Wallis, and Bonferroni pairwise comparison tests. After 6–8 weeks, the prevalence of academic burnout was 17.4 per cent and 73.5 per cent for moderate and high levels of academic burnout, respectively. After 6–8 weeks, emotional eating (EEat) scores differed substantially from levels of academic burnout ($p = 0.0103$). However, no significant changes were detected in other subscales, such as cognitive restraint (CR) and uncontrolled eating (UE). Again, the data revealed a weak correlation between academic fatigue and eating disorders.

Haile, Senkute, Alemu, Bedane, and Kebede (2019) assessed students' academic burnout levels in another study. This study aimed to determine burnout's prevalence and risk factors among Debre Berhan University students (DBU). Cross-sectional research was done on 151 DBU medical students who were chosen at random. The Maslach Burnout Inventory-Human Services Survey was used to measure burnout (MBI-HSS). Participants were considered burnout if they scored 27 on the MBI-HSS Emotional Exhaustion (EE) subscale, 13 on the Depersonalization (DP) subscale, and 31 on the Personal Accomplishment (PA) subscale.

Both univariable and multivariable binary logistic regression analyses were performed. The degree of connection between factors was determined using an odds ratio (OR) with a 95% confidence interval (CI) and a two-tailed p-value of 0.05. 34.0 per cent of the 144 medical students who participated in the study exhibited burnout symptoms. Regarding burnout domains, (61.8) per cent scored highly on EE, (47.9) per cent scored highly on DP, and (59.7) per cent scored low on PA. The researchers concluded that more than one-third of the university students experienced academic burnout and recommended individual and organizational level interventions aimed at students who lacked social support, were dissatisfied with their lecturers and were unhappy with their education.

Kaggwa et al. (2021) also investigated student academic burnout. The purpose of this study was to evaluate the prevalence of burnout among university students in low- and middle-income countries in a systematic manner (LMICs). The study looked at PubMed, Google Scholar, CINAHL, Web of Science, African Journals Online, and Embase from their establishment through February 2021. The original research was included. There were no constraints on the study's design or phrasing. STATA version 16.0 was used to do a random-effects meta-analysis. Q-statistics and funnel plots were used to analyze heterogeneity and publication bias. Fifty-five distinct articles were selected, representing a total of 27,940 (Female: 16,215; 58.0 percent) university students from 24 LMICs. In 43 research, the Maslach Burnout Inventory (MBI) was employed (78.2 %).

The overall prevalence of burnout was 12.1 percent (95% CI 11.9–12.3; I2 = 99.7%, Q = 21,464.1, p = 0.001). The pooled prevalence of

emotional exhaustion (feelings of energy depletion), cynicism (negativism), and reduced professional efficacy were 27.8 per cent (95 per cent CI 27.4–28.3; I2 = 98.17 per cent. p = 0.001), 32.6 per cent (95 per cent CI: 32.0–33.1; I2: 99.5%; p = 0.001), and 29.9% (95%) The researchers found that roughly one-third of university students in LMICs suffered from burnout and suggested that further study be conducted to better understand the causes of burnout in this important demographic.

Furthermore, Vidhukumar and Hamza (2020) also evaluated student academic burnout levels. The researchers wanted to find out how common academic burnout was and what caused it among medical students. Data was acquired from 375 students throughout five professional years. The study mainly relied on the "personal burnout" component of the Copenhagen Burnout Inventory (CBI), a validated instrument used to diagnose burnout at a cut-off score of 50. A list of probable personal correlates of burnout was also provided in the questionnaire. In addition to summary data, univariate and multivariate analyses were utilized to determine the association.

Burnout was found to be prevalent among 48.5% of medical students at the college under investigation (95% confidence range 43.4–53.7). Moderate, higher, and severe burnout were represented by 44.8%, 3.2%, and 0.5%, respectively. Burnout was shown to be linked with female gender and perceived stress in both univariate and multivariate studies. Choosing one's medication and retaining hobbies and interests were linked to a lower risk of burnout. The researchers found that academic burnout was a common issue among medical students and indicated that there were modifiable risk factors

for burnout that should be addressed to teach medical students with high motivation and professionalism.

Finally, Sufia and Latif (2016) investigated academic burnout levels among students at the university. The study was carried out to confirm the occurrence of burnout among university students at a public sector dental college. There were 275 students who participated in the study by completing the Maslach Burnout Inventory. According to the survey, the burnout dimension's most excellent ratings were for tiredness and depersonalization. Students in the research also indicated significant emotional weariness, particularly fourth-year students. This might be due to fourth-year students' clinical tasks, which required them to work on patients in the limited area of the mouth cavity. They must also strive hard to meet their designated clinical service quota. The persistent anxiety about carrying out and completing tasks during the rotation period of the academic year may be adding to their burnout levels. Again, the study found that most students reported moderate to high levels of emotional tiredness and a sense of depersonalization in their final year. Finally, burnout was exhibited by older students and those in their last year of training. As a result, the researchers determined that dental students experienced academic burnout at the institution.

Academic Resilience as a predictor of Academic Burnout

Oyoo, Mwaura, and Kinai (2018) researched academic resilience and academic burnout. The study aimed to determine how academic resilience predicted academic burnout among students in Homa-Bay County, Kenya. The principle of resource conservation guided the research. A correlational study design was used. A total of 714 students were chosen from thirty-one

public secondary schools. Data was gathered using questionnaires derived from the Resilience Scale (RS14) and the Maslach Burnout Inventory-Student Survey (MBI-SS). The Pearson Correlation Moment Coefficient and hierarchical regression methods were used to evaluate the data. Academic resilience and burnout were shown to have a negative statistical correlation (r (712) = -.24, p.05). The findings of the study have ramifications for teachers and school officials who want to improve and enforce programs that teach pupils resilience skills.

Furthermore, Romano, Consiglio, Angelini, and Fiorilli (2021) explored academic resilience and burnout. The study aimed to investigate the link between academic resilience and burnout and the moderating influence of relationship satisfaction with professors and classmates. Participants were 576 Italian teenagers (female = 53.1%), ages 14–18 (M = 15.73, SD = 1.56) from various high schools in Northern (29.7%), Central (35.6%), and Southern Italy (34.7%). Correlations and moderated regression analyses were performed in the analysis.

It was found that academic resilience ($r=0.35$, $p<0.001$) and satisfaction with teacher relationships ($r=0.30$, $p<0.001$) were both substantially and negatively associated with school burnout. The study's findings revealed that academic resilience and satisfaction were negatively associated with school burnout. Furthermore, contentment with classmates' connections impacted the association between academic resilience and burnout. Thus, the researchers emphasized the necessity of increasing both individual and environmental variables of intellectual strength to reduce the risk of academic burnout.

Trigueros et al. (2020) in a study, explored academic resilience and academic burnout among students. This study sought to investigate the impact of teacher leadership on academic resilience and motivation, burnout, and academic achievement. The study's sample size was 3354 university students, with 1653 males and 1701 women. The students were enrolled at Granada and Almeria universities. Their ages ranged from 18 to 31 years (M = 22.36; SD = 1.88). Based on the university centres they had access to and the students who wished to participate, the sampling approach was non-probabilistic and accidental. To be eligible to participate in the study, participants had to provide informed permission, signed by a parent or legal guardian.

A structural equation model was created to examine the predicted correlations between the variables in the research. The findings revealed that teacher leadership influenced academic resilience and motivation positively. Notably, academic resilience positively predicted burnout and also positively predicted academic achievement. The researchers concluded that resilience was important in dealing with burnout and that academic contexts could produce positive and negative situations such as burnout in the classroom. They recommended that the role of the teacher was critical to a positive transformation in students' classroom experiences.

Lee (2019) also explored academic resilience and academic burnout. The study aimed to determine the impact of resilience on academic burnout in nursing students. Through a questionnaire, 300 nursing students from a town called (C do) in Korea participated. The data was analysed using the Paired t-test, ANOVA, Pearson's Correlation coefficient, and Multiple Regression. The outcomes were as follows. There was a statistically significant association

between resilience and academic burnout (r=-.512, p<.001). Multiple regression study found that academic burnout in nursing students was substantially influenced by nursing significant satisfaction (r=.380, p<.001), health status (r=.171, = p.040), and resilience (r=.333, p<.001), with R^2 showing a 41.0 per cent explanation force for these components. The study concluded that resilience was linked to decreased levels of academic burnout.

Bahrami, Amiri, and Abdollahi (2017) also explored academic resilience and academic burnout. The researchers investigated the association between perception of the learning environment and academic burnout, as well as academic resilience as a moderator, among Hakim Sabzevari University students. The study was cross-sectional (modelling of structural relationships). A sample of 170 students was used for the study. The Dundee Ready Educational Environment Measure questionnaire, Samuel's Academic Resilience questionnaire, and the Breso Academic Burnout questionnaire were used in collecting data.

The study's findings revealed that the impression of the learning environment substantially influenced academic burnout r= (-0.33) and academic resilience r= (0.51). Furthermore, the researchers concluded that academic resilience substantially impacted academic burnout r= (-0.55). Aside from the direct results, the indirect effect of learning environment perception on academic burnout via academic resilience was considerable r= (-0.28).

Again, Kamalpour, Azizzadeh-Forouzi, and Tirgary (2017) explored student academic resilience and burnout. This study investigated the association between resilience and academic burnout among nursing students at Kerman University of Medical Sciences in Iran. A total of 161 nursing

students participated in this descriptive correlational research. Data were gathered using the Connor Davidson Resilience Scale (CD-RISC) and the Academic Burnout Questionnaire (Breso et al.). The findings were analysed using the Pearson correlation coefficient, independent t-test and ANOVA. The demographic results of this survey revealed that 154 (957%) participants were 19-24 years old, with 62.7 per cent being women and 37.3 per cent being males. Academic burnout and resiliency had mean ratings of (4156) ± (865) and (6632) ± (1157), respectively. Pearson correlation coefficient data revealed a negative statistical relationship between academic burnout and resiliency (r = -0.26, P =.0001). The researchers found a strong association between academic burnout and resilience among Kerman University of Medical Sciences nursing students. As a result, pupils with better resiliency reported less academic fatigue.

Academic Engagement as a predictor of Academic Burnout

Ghadampour, Farhadi, and Naghibeiranvand (2016) researched students' academic engagement and the academic burnout that they experience. The research aimed to examine the connection between academic burnout, academic engagement, and performance among students attending Lorestan University of Medical Sciences. The total number of students enrolled at Lorestan University of Medical Sciences constituted the study population, totalling 2,600 individuals. The sample consisted of 335 individuals from various faculties and were selected via stratified sampling. Both the academic engagement questionnaire developed by Schaufeli et al. and the academic burnout questionnaire developed by Bersou et al. were utilized in the data collection process. In addition, students' grade point

averages were used to determine their overall academic success. Ultimately, the data were examined using the stepwise multiple regression analysis and the Pearson correlation coefficient.

According to the findings of the research, a strong inverse correlation existed between academic burnout and academic engagement (P< 0.001, r = -0.49). In addition, there was a strong inverse link between academic burnout and academic achievement (P <0.001 and r = -0.17). The findings of stepwise regression analysis revealed that the factors of academic burnout predicted academic engagement (P<0.001) and academic performance (P<0.01), respectively. The findings also revealed that the factors of academic burnout predicted academic engagement. Academic burnout, academic engagement, and the performance of students were all shown to have a link with one another. The researchers indicated that educational managers in colleges of medical sciences should consider burnout during educational planning to boost engagement. This was because the researchers found that minimizing burnout might improve and raise both performance and engagement.

In another research, An et al. (2017) investigated the academic engagement levels of students as well as their levels of academic burnout. The objectives of the study were to examine and compare the levels of intellectual engagement, academic burnout, stress, and social support experienced by undergraduate nursing students at varying grade levels. A total of 247 undergraduate nursing students from G city's three different educational institutions participated in the study. According to the research findings, there were discernible variations in the levels of academic engagement, academic burnout, and stress exhibited by the students in each of the different grades.

The findings of the post-hoc analysis revealed that sophomores and juniors had lower levels of academic engagement and greater levels of academic burnout and stress compared to other students (i.e., freshmen or seniors). There was no discernible difference in the social support that nursing students received from one another. A positive association was found between academic involvement and social support, and a negative correlation was found between academic engagement and academic fatigue and stress.

Furthermore, academic burnout was negatively linked with academic engagement and social support but positively correlated with stress. According to the findings of the study, nursing students were in danger of academic burnout and stress in their second and third years in school. As a result, the researchers suggested that sophomores and juniors should get increased attention and care to assist them in relieving and controlling stress and burnout and boost their academic engagement. Additionally, implications were considered throughout designing plans and interventions for nursing students' significant adjustment and academic accomplishment.

Gómez et al. (2015) researched the levels of academic engagement and academic burnout experienced by students. The study aimed to determine the connection between academic engagement and academic burnout among first-year medical students. Two questionnaires, the Utrecht Work Engagement Scale-Student and the Maslach Burnout Inventory Student Survey (MBI-SS) were administered to 277 medical students in their first year at four different institutions. Engagement levels were high, while burnout levels were low. There was a high degree of contentment with the studies, notwithstanding the modest amount of weariness experienced. Academic success was shown to be

correlated with the degree of engagement with one's studies but not with academic exhaustion.

Singh, Kumar, and Srivastava (2020) also examined academic burnout and academic engagement among students. The study aimed to evaluate the impact of academic burnout and student engagement in the Delhi-National Capital Region (NCR) region in Northern India. In addition, it made an effort to investigate the moderating effect of internal locus of control and the mediating influence of loneliness on the link between academic burnout and student involvement. The information was gathered from 264 individuals. Descriptive statistics, correlation analysis, and moderated-mediated regression analysis were utilized to test the hypotheses. According to the research findings, there was a negative connection between student involvement, academic fatigue, and loneliness.

Furthermore, there was a correlation between academic burnout and feelings of isolation, and the presence of an internal locus of control has a mitigating effect on the link between academic burnout and student participation. The association between academic burnout and student involvement was regulated by the presence of loneliness, which served as a partial mediator for the relationship.

Salmela-Aro and Read (2017) researched into academic engagement and academic burnout. A person-oriented approach was applied to identify profiles of study engagement and burnout (i.e., exhaustion, cynicism, inadequacy) in higher education in a large and representative sample of 12,394 higher education students at different phases of their studies in universities and polytechnics in Finland. Four profiles were identified: *Engaged* (44%),

engaged-*exhausted* (30%) *inefficacious* (19%) and *burned-out* (7%). The engaged-exhausted students experienced emotional exhaustion simultaneously with academic engagement. Of these groups, the engaged students tended to be in the earlier stages of their studies, whereas the burned-out and inefficacious students had been studying the longest. The pattern suggested that students starting out with high engagement eventually became burned out and it is more common later in one's academic career. Supporting demands-resources model, the covariates reflecting the demands were higher and those reflecting resources were lower among the burned-out and inefficacious students compared to the engaged students.

Differences between Academic Burnout of Male and female Students

Rahmatpour et al. (2019) studied the extent of academic burnout among students on the basis of gender. The purpose of this study was for the researchers to investigate the extent to which students at Guilan University of Medical Sciences experienced academic burnout and the factors that were connected with it. The study involved 303 undergraduate students at the Guilan University of Medical Sciences. It was a cross-sectional investigation. The Maslach Burnout Inventory was the foundation for determining the state of individual items in the burnout inventory. Descriptive and inferential statistics, such as the t-test and linear regression, were utilized in the data analysis process.

The participants in the research reported an average academic burnout score of 2.53 with a standard deviation of 0.7. In addition to the elements that were connected to academic burnout, marital status (P = 0.029), grade point average (P = 0.002), study time (P = 0.000), and an interest in the topic of the

study were substantially correlated with academic burnout in students. In addition, male students reported significantly greater levels of academic burnout on each MBI-SS subscale as compared to female students.

Onuoha and Akintola (2016) in a study examined gender disparities in academic burnout. The sample included 273 students, 129 were males and 144 were females. The participants' ages varied from 21 to 34 years old, with a mean of 22.55 and a standard deviation of 3.37. The findings showed that gender did not significantly influence academic burnout characteristics of students. Furthermore, the results showed that the effect of gender on the various attributes of academic burnout was debatable.

Paidar, Amirhooshangi, and Taghavi (2017) also studied gender variations in academic burnout. The study aimed to investigate gender variations in students' perceptions of their mathematical abilities and levels of academic burnout. Students in the first grade of high school, both male and female, constituted the sample, which was chosen using a procedure called one-stage cluster sampling. The mathematics self-concept scale developed by Radi in 2011 and a school burnout inventory developed by Salmela-Aro and Naatanen in 2004 were instruments used to collect data. The data were evaluated using an independent t-test. The results showed that the mean scores in mathematics self-concept and its subscales components (skills and capabilities, mathematics enjoyment and mathematics avoidance) were not significantly different between male and female students at .05 level. On the other hand, the results showed that the mean scores of academic burnout and its components (exhaustion, cynicism, and inadequacy) were higher in male students than females at .05 level. Both male and female students had the same

levels of mathematics self-concept and its components. The findings revealed that male students had much greater levels of academic burnout and its features than female students did.

Lastly in Nigeria, Ogbueghu et al. (2019) studied gender differences in academic burnout. The study objective was to ascertain gender differences in academic burnout among Economics Education undergraduate students in South-East Nigeria. The study employed a cross-sectional research design. Respondents were a convenience sample of 550 Economics Education students from federal universities in the area of study. A self-report burnout questionnaire was used for data collection. Mean, standard deviation and t-test were used for analysis of data. The outcome of the study revealed that there was no significant mean difference in academic burnout among male and female undergraduate students in Economics Education. Thus, it was recommended that Government through higher education regulatory bodies should intensify efforts in providing adequate facilities, good learning environment and manpower to encourage effective learning and reduce burnout symptoms among Economics Education students in South-East Nigeria.

Differences in Academic Burnout concerning Level of Education

Sunawan, Amin, Hafina and Kholili (2021) investigated differences in academic burnout concerning the level of education. The research was primarily intended to examine the condition of student burnout induced by online learning during the COVID-19 epidemic. This study examined the students' burnout from the degree of education and duration of daily online learning during COVID-19 Pandemics. School Burnout Inventory (SBI) was

distributed to 2,310 students and examined using crosstabs analysis and two-way ANOVA. The data indicated that most students at the junior high school (49.9%), senior high school (52.8%), and university (43.8 %) levels had online learning duration between 1 and 3 hours per day. The findings of the study also suggested a difference in the interaction between education level and course of daily online learning at the level of burnout F= (8, 2295) r= 2.47, p <0.05). The research has significance for guidance and counselling services for students throughout the epidemic and the new-normal COVID-19.

In another study, Morales-Rodríguez, Pérez-Mármol and Brown (2019) examined how education level also affected academic burnout. The study aimed to identify the self-reported degrees of burnout and engagement in a sample of Australian Occupational undergraduate therapy students and examine the sociodemographic, occupational and academic features linked with these levels. Participants were 225 Australian undergraduate occupational therapy students from Monash University who completed the MBI-SS and the UWES for students. Descriptive, bivariate and multivariate linear regression analyses were done. The results demonstrated that for MBI-SS burnout characteristics, tiredness was connected with age, year level of enrolment and hours of direct time spent working on occupational therapy studies, explaining 15 per cent of its variation. Cynicism and effectiveness were connected with age, year level of enrolment and hours of indirect time, accounting for 16 per cent of its interpretation. For the UWES engagement dimensions, year level of enrolment and hours of indirect time spent working on occupational therapy studies were significant predictors of vigour, explaining 27 per cent of its variance.

In contrast, age, gender, year level of enrolment, hours of indirect time spent working on occupational therapy studies, and hours spent per week engaged in self-care activities accounted for 23 per cent of the variance of dedication. Finally, age, year level of enrolment, and hours of indirect time spent working on occupational therapy studies explained 27 per cent of the variation of absorption. The results suggested that various demographic and academic study characteristics are substantially connected with burnout syndrome and education engagement reported by undergraduate occupational therapy students.

Salgado and Au-Yong-Oliveira (2021) investigated how education level affected academic burnout. The study focused on academic burnout and taking medication as a consequence of students' academic path requirements at a Portuguese public university. Concerning educational qualifications, the differences were close to statistical significance (p = 0.065); that is, there seemed to be a trend towards higher levels of burnout in one academic level of students than in others. However, it cannot be considered that there were statistically significant differences between the first cycle (M = 2.57; SD = 0.96) and the academically higher study cycles (M = 2.33; SD = 0.85) in the levels of burnout. Therefore, based on the results obtained, it was impossible to establish a relationship between burnout and sociodemographic variables, such as academic variables, e.g., year in higher education.

In summary, the empirical review covered three variables in the study, namely, academic resilience, academic engagement and academic burnout. In most reviewed studies above, it has been proven that the independent variables; academic resilience and academic engagement have an inverse

relationship with the dependent variable which is academic burnout. Hence, as academic resilience and academic engagement increase, academic burnout decreases and vice-versa.

Conceptual Framework

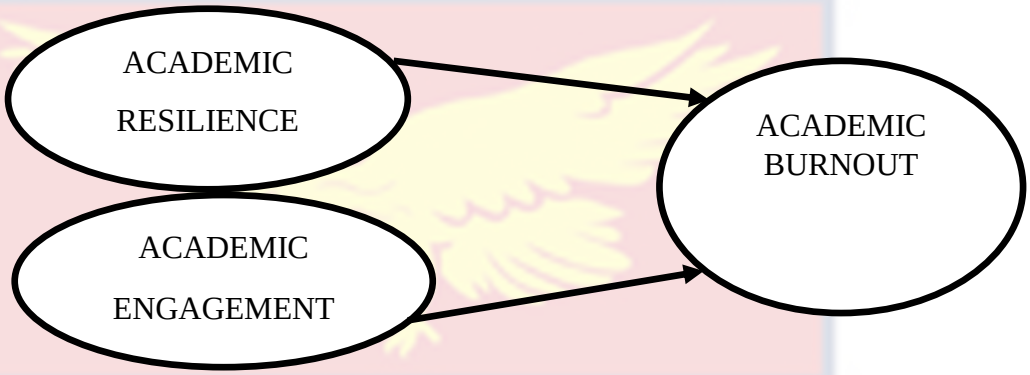

Figure 1: Academic Resilience and Academic Engagement as predictors of Academic Burnout
Source: Authors own Construct 2022

As shown in figure 1, this conceptual framework illustrates the interplay between the study's independent and dependent variables. The researcher asserts that academic resilience and engagement are the independent variables while academic burnout is the dependent variable. It illustrates that academic resilience and engagement may positively or negatively predict the academic burnout that postgraduate students face.

Chapter Summary

The literature highlighted how academic resilience and engagement act as predictors of academic burnout among postgraduate students at the University of Cape Coast in Ghana. The literature was captured under four (4) categories. These categories include the theoretical review, conceptual review, empirical review, as well as the conceptual framework. Demands and Resources Model, Theory of Student Involvement and Resiliency Theory, which were found to be the most pertinent to the study, were expressly stated,

explained, and a relationship between them and this study was formed. This was done in order to provide context for the findings of the study. The empirical studies that were looked at were related with the set objectives of the study. The next chapter presents the research method employed in carrying out the study.

CHAPTER THREE

RESEARCH METHODS

Introduction

The present study investigated academic resilience and engagement as predictors of academic burnout among postgraduate students at the University of Cape Coast in Ghana. This chapter describes the method and procedures by which the research was conducted. It includes the research design, the study area, population, sample and sampling procedure, the instruments used for the data collection, data collection procedure, pilot testing of the instrument, ethical issues and finally, the data analysis procedure and chapter summary.

Research Paradigm

The researcher adopted the positivists' paradigm. Positivists believe knowledge can be "revealed" or "discovered" through the scientific method. The "discovered" knowledge enables us to provide possible explanations of the causes of things that happen in the world. A positivist approach emphasises experimentation, observation, control, measurement, reliability, and validity in the research processes. This implies a quantitative approach. Positivists argue that scientific research produces precise, verifiable, systematic, and theoretical answers to the research question or hypothesis. They also suggest that the scientific method provides neutral and technical solutions and can thus be universalised and generalised to all historical and cultural contexts.

The current study investigated academic resilience and engagement predictors of academic burnout. As such, questionnaires were utilised to gather and obtain quantitative data from respondents, and statistical techniques were

employed to analyse the data collected. As a result, the Positivist viewpoint was justified.

Research Approach

The researcher adopted the quantitative approach. Quantitative research methods emphasise objective measurement and the statistical, mathematical, or numerical analysis of data collected through polls, questionnaires, and surveys or by manipulating pre-existing statistical data using computational techniques (Amedahe & Asamoah-Gyimah, 2015). In addition, quantitative research focuses on gathering numerical data and generalising it across groups of people or explaining a particular phenomenon. Quantitative data analysis is an effective research technique based on the positivist view. It is linked to large-scale investigations but may also be used for smaller-scale ones, including case studies, correlational analyses, action research, and trials.

Precision assessments and analytical, mathematical, or numeric interpretation of the information collected through polls and questionnaires as well as by computer-aided data modification of pre-existing statistical data are the focus of quantitative research. It is associated with acquiring quantitative data and evaluating it across population sections or comprehending a single occurrence. For example, examining the relationships between and among data is crucial for conducting surveys and tests to answer questions and test hypotheses.

Research Design

Research design is a researcher's overall plan to obtain answers to the research questions or test the research hypotheses (Amedahe & Asamoah-

Gyimah, 2015). A research design provides a framework for the entire research activity. A research design entails the chronological procedures that the researcher employs in conducting an empirical inquiry to generate information that can be subsequently analysed and interpreted. Amedahe and Asamoah-Gyimah (2015) also maintain that in descriptive survey, the objective is an accurate description of activities, objects, processes, and persons. Amedahe and Asamoah-Gyimah (2015) again noted that descriptive research is not merely fact-finding per se but then deals with interpreting the relationships among variables and describing the relationship.

In line with the aim of this study, the descriptive survey design was adopted. The descriptive survey research was adopted based on the direction and aim of the study. For this reason, the purpose of descriptive survey design is to observe and collect aspects of a situation as it naturally occurs. In descriptive survey design, the events or conditions either already exist or have occurred, and the researcher merely selects the relevant variables to analyse their relationships. A descriptive survey aims to describe a phenomenon and its characteristics. The motivation for this type of design was based on the researchers' objective to describe the population accurately and systematically.

Also, in a descriptive survey design, it is possible to present data systematically to arrive at valid and accurate conclusions. Finally, an advantage of descriptive survey research is that it can provide us with a lot of information obtained from quite a large sample of individuals. These advantages of the descriptive survey design were the reason for its use in the study. The researcher was able to arrive at generalisations from specific situations. The descriptive survey design also allowed the researcher to present

data systematically to arrive at an accurate conclusion. However, demerits of the design are that the descriptive survey research only provides a snapshot of the current situation and cannot establish cause-and-effect relationships.

Study Area

The study was conducted at the University of Cape Coast. The University of Cape Coast is a public collegiate university located in the historic town of Cape Coast. The campus has a rare seafront and sits on a hill overlooking the vast Atlantic Ocean. It operates on the Southern Campus (Old Site) and the Northern Campus (New Site). Two of Ghana's most important historical sites, Elmina and Cape Coast Castle, are a few kilometres from its campus. The University of Cape Coast was established in October 1962 as a University College in response to the country's dire need for a highly qualified and skilled workforce in the education sector. Therefore, its original mandate was to train graduate teachers for second-cycle institutions, teacher training colleges, and technical institutions, a mission that the two existing public universities at the time were unequipped to fulfil.

On October 1, 1971, the college attained the status of a full and independent university, with the authority to confer its degrees, diplomas, and certificates by an Act of Parliament. Today, with the expansion of some of its faculties/schools and the diversification of programmes, the University can meet the workforce needs of other ministries and industries besides the Ministry of Education. The University has since added the training of doctors, health care professionals, business professionals, administrators, legal professionals, and agriculturalists. University of Cape Coast offers a wide range of undergraduate and graduate courses spanning from Bachelor of Arts

(BA), Bachelor of Commerce (B.Com.), Bachelor of Education (B.Ed.), Bachelor of Science (B.Sc.), Bachelor of Laws, (Literally Legum Baccalaureus, LLB), Master of Arts (M.A.), Master of Business Administration (M.B.A), Master of Commerce (M.Com.), Master of Education (M.Ed.), Master of Science (M.Sc.), Master of Philosophy(MPhil), Bachelor of Medicine/Surgery (M.B.Ch.B.), Doctor of Optometry (O.D.), and Doctorate of Philosophy (Ph.D.).

The University of Cape Coast is today organised into five colleges: College of Education Studies, College of Humanities and Legal Studies, College of Agricultural and Natural Sciences, College of Health and Allied Sciences and College of Distance Education. Each college has different faculties, schools, and departments. Thus, this study was be conducted at the University of Cape Coast, focusing on regular students pursuing their masters at various colleges except for the College of Distance Education.

Population

The study's target population included all University of Cape Coast postgraduate students, who are 1,786. This consists of both Master's and Doctorate Students who belong to the various colleges at the University of Cape Coast who are in levels 800, 850, 900 and 950. The accessible population of this study, however, included regular first-year students pursuing their Masters' degree and Doctorate degrees, respectively and belong to the various Colleges at the University of Cape Coast, who are **847** in total. Therefore, the sample size for this study was chosen based on Krejcie and Morgan (1970). The population of students is represented in table 1;

Table 1: *Population of Students*

COLLEGES	800	850	900	950	Males	Females	Total
CANS	98	67	51	98	236	78	**314**
COES	280	261	97	138	447	329	**776**
COHAS	21	31	4	3	36	23	**59**
COHLS	205	232	91	105	405	232	**637**
TOTAL							**1786**

Source: Field Survey (2022)

Sampling Procedure

Sampling is where the researcher selects either probability (a representative selection) or a non-probability sample (a purposive sample) as study participants. In a probability sample, members of the general population have a known probability of being chosen for the sample. In contrast, in a nonprobability sample, individuals of the general populace possess an undetermined likelihood of being picked for the sample (Cohen, Manion, & Morrison, 2018). Any participant of the general populace gets an unbiased opportunity of being involved in the sample in the former (probability sample); addition or removal is wholly decided by randomness. Some individuals of the wider public will be excluded.

In contrast, biases will be shown in the latter (non-probability sample), indicating that no person of the wider public will have a fair shot of being represented in the sample. A probability sample is advantageous if the researcher wants to be capable of making generalizations since it is selected at chance from the broader population. It also seeks the generalizability of the bigger group. (Quantitative data can also be used for several statistical tests). According to Krejcie and Morgan's table for determining sample size, a population of 847 has a representative sample of **265**.

To get the participants, the researcher employed a proportionate stratified sampling technique to select equal proportions of students from their colleges for the study. The proportionate stratified sampling method was used to select equal proportions of students based on their gender and level of education from the four colleges. Finally, the simple random sampling technique, specifically, the lottery method was adopted to ensure that each member of the representative population had a fair and unbiased chance of being selected for the study. Hence, a sampling frame with the list of all students in the colleges was used to select the 265 students per their index or registration numbers.

Table 2: *Distribution of Students*

COLLEGES	800	900	Total	Sample	800		900	
					M	F	M	F
CANS	98	51	149	46	26	4	12	4
COES	280	97	377	119	48	40	18	13
COHAS	21	4	25	8	4	2	1	1
COHLS	205	91	296	92	40	24	21	7
			847	**265**		**265**		

Data Collection Instruments

The Academic Resilience Scale (ARS) developed by Cassidy (2016) was adapted to measure the level of academic resilience among postgraduate students. The academic resilience scale is an instrument Cassidy (2016) developed to reflect the construct's multidimensional nature. It aims to quantify the academic resilience levels of students concerning their responses to educational hardship. It comprised 30 items scored on a 5- point Likert scale ranging from unlikely (1) to likely (5). In addition, it consisted of 14 items related to perseverance, nine items about reflecting and adaptive help-

seeking, and seven items on negative affect and emotional response. The reliability coefficient for the perseverance, reflecting and adaptive help-seeking and affect and emotional response sub-dimensions were .83, .78, and .80, respectively. Overall, the overall Cronbach's reliability coefficient for the scale was .90.

The University Student Engagement Inventory (USEI) was adapted to measure the academic engagement variable of the study. The University Student Engagement Inventory by Maroco, Maroco, Campos and Fredricks (2016) measured student engagement. In the USEI, student engagement is conceptualised in behavioural, emotional, and cognitive dimensions. Behavioural engagement is defined as students' participation in classroom tasks, student conduct, and participation in school-related extracurricular activities. Cognitive engagement is the students' investment and willingness to exert the necessary efforts for comprehending and mastering complex ideas and challenging skills. Emotional engagement is defined as attention to teachers' instructions, perception of school belonging, and beliefs about the value of schooling. The USEI consisted of 15 items on a five-point Likert scale. The Cronbach α coefficient for the behavioural, emotional, and cognitive dimensions are .74, .88, and .82, respectively, with a total Cronbach α coefficient of .88. The items were structured under three dimensions; behavioural, cognitive and emotional. There were five items each on the three dimensions of the scale

Finally, the Maslach Burnout Inventory-Student Survey was adapted to measure academic burnout. The Maslach Burnout Inventory–Student Survey (Schaufeli et al., 2002) included three subscales with 15 items. High scores on

Emotional Exhaustion, Cynicism, and low scores on Academic Efficacy indicate burnout (Academic Efficacy items were reverse scored). All three subscales had high internal consistency with Cronbach's α coefficient values of .869, .856, and .852 for the Emotional exhaustion, Cynicism, and Academic efficacy dimensions with an overall Cronbach α coefficient of .75. There were five items on exhaustion dimension, four items on cynicism dimension and six items on academic efficacy dimension.

Pilot Testing

Pilot testing is a rehearsal of the research study, allowing researchers to test their research approach with a small number of test participants before they conduct the principal analysis (Dikko, 2016). The primary purpose of a pilot study is to evaluate the feasibility of the proposed significant study (Cohen, Manion & Morrison, 2018). The pilot test may also estimate costs and the necessary sample size for the greater study. The pilot testing of all instruments used in the study was done at the University of Education, Winneba, to ascertain the tool's reliability. Thirty students pursuing their postgraduate studies were used for the pilot test. According to Connelly (2008), extant literature suggests that a pilot study sample should be 10% of the sample project for the more extensive parent study. Therefore, postgraduate students from the University of Education, Winneba, were used because they share similar characteristics with the accessible population and can represent the targeted population.

After pilot testing, the instrument was subjected to a test of internal consistency using Cronbach Alpha (r). Section B (Academic Resilience), which comprised 30 items had a reliability index of 0.860, Section C

(Academic Engagement), which comprised 15 strategies had a reliability index of 0.70, while Section D (Academic Burnout), with 15 items had a reliability index of 0.89.

Validity and Reliability of the Instrument

Boparai, Singh and Kathuria (2018) and Xi (2021) recommend that questionnaires be piloted in schools outside the considered sample to establish whether the questions are measuring what they are intended, whether the wording is precise, whether the questions are ambiguous and whether the questions provoke a response. The research instruments were pilot tested with a selected pilot sample identical to the actual sample to ascertain reliability (Tsounis & Sarafis, 2018).

Data Collection Procedure

The researcher obtained an introductory letter from the Department of Education and Psychology, sought ethical clearance from the UCC Institutional Review Board and created a rapport with the respondents through their email to enquire about their participation in the study. In addition, the respondents were informed of the purpose and objectives of the study. The researcher personally delivered the questionnaires and explained ambiguous items to respondents. The researcher briefly explained the study's aim and the importance of the research to the participants. Questionnaires were distributed to people who accepted to be part of the study. Confidentiality was assured. The researcher used approximately 8 weeks to collect data from participants with the help of well-trained assistants. 295 questionnaires were administered but 265 questionnaires were returned yielding a response rate of 90%. The

questionnaires were delivered to the participants in groups at the lecture room where lecturers were not available or teaching at that moment.

Ethical Consideration

Ethical issues in research were adhered to. Thus, confidentiality, anonymity and informed consent were sought before questionnaires were administered. Only willing participants were engaged in the study and were told to feel free to withdraw at any time. The purpose of the survey was also thoroughly explained to respondents to make them aware of the significance of their input towards the research.

Data Processing and Analysis

Research Questions 1,2, and 3 were analysed using means and standard deviations. This is because the researcher was interested in knowing the levels of the academic resilience, engagement and burnout. In measuring the level, the researcher sought to compare the means and averages of the construct.

Hypotheses 1 and 2 were tested using both simple and multiple linear regression analysis. The researcher adopted these analytical tools because the researcher was interested in knowing how the combined effect as well as the individual effect of the independent variables (academic engagement and academic resilience) predicted the criterion variable (academic burnout). In addition, these variables were also both measured on the continuous variable. Thus, such a circumstance caters for the various dimensions.

Hypotheses 3 and 4 were tested using independent samples t-test. The independent samples t-test was considered appropriate to find significant differences because both ‘gender and level of education’ as categorical

variables had two levels (male and female) as well as (level 800 and level 900), while academic burnout' was measured on a continuous scale.

Chapter Summary

The descriptive survey design, specifically, the survey design, with a quantitative approach was employed in the conduct of the study. The population of this study comprised regular postgraduate students (First-year Masters and Doctoral students) of the University of Cape Coast, with a total number of 847. Through the stratified and simple random sampling techniques, a sample of 265 regular postgraduate students were used for the study. Thirty (30) questionnaires were however not filled and returned, this resulted in a 90% response rate. Efforts were also made in ensuring validity and reliability of the results through the conduct of the study. The data collected were analysed using means and standard deviations, simple and multiple linear regressions and independent samples t-test.

CHAPTER FOUR

RESULTS AND DISCUSSION

The study examined academic resilience and engagement as predictors of academic burnout among postgraduate students at the University of Cape Coast. This investigation was carried out using descriptive survey design. Questionnaire was used to gather data from the respondents. Out of the 295 questionnaires administered, 265 of them were completely responded to and returned. This led to a response rate of 90%. Hence, all the analyses in this chapter were based on 265 respondents. This chapter presents the results and discussion of the results. In terms of the results, the demographic characteristics of the respondents were presented first, and this was subsequently followed by the results of the research questions and hypotheses as well as the discussion of the results.

Demographic Characteristics of Respondents

This section presents results on the respondents based on demographic distribution. The demographic information include gender, college of study and the academic level of education.

Gender Distribution of Respondents

Table 3: *Gender of students*

Gender	Frequency	Percent
Male	170	64.2
Female	95	35.8
Total	**265**	**100.0**

Source: Field Survey (2022)

The results in Table 3 indicate that, out of a sample of 265 respondents, 170 of them were males (64.2%) whereas 95 were females (35.8%). This suggests that, the responses were dominated by male students compared to their female counterparts. This is understandable as the population of the University of Cape Coast postgraduate graduate students is dominated by males.

Distribution of College of Affiliation among Respondents

Table 4: *Distribution of Students' College of Affiliation*

College	Frequency	Percent
College of Education Studies	119	44.9
College of Health and Allied Sciences	8	3.0
College of Humanities and Legal Studies	92	34.7
College of Agricultural and Natural Sciences	46	17.4
Total	**265**	**100.0**

Source: Field Survey (2022)

The results in Table 4 indicate that, out of the 265 respondents, 119 of them were affiliated to College of Education Studies (44.9%), 8 were affiliated to College of Health and Allied Sciences (3.0%), 92 were affiliates of College of Humanities and Legal Studies (34.7%), and 46 of the respondents were affiliates of College of Agriculture and Natural Sciences (17.4%).

Distribution of Academic Level of Respondents

Table 5: *Academic Level of Students*

Level	Frequency	Percent
800	188	70.9
900	77	29.1
Total	**265**	**100.0**

Source: Field Survey (2022)

The results in Table 5 indicate that, out of 265 students, 188 students were in level 800 or pursuing their master's degree in first year whiles, 77 of the students were in level 900 or pursuing their doctoral degree (29.1%). This suggests that most of the respondents were level 800 students.

Results

This section entails the findings from the respondents of the study. It was guided by three research questions and four research hypotheses. The findings are presented in the subsequent paragraphs.

Research Question 1: What is the level of academic resilience among postgraduate students at the University of Cape Coast?

This research question sought to determine the level of academic resilience among students. A 5-point Likert-type scale with 30 items was used to assess the academic resiliency levels of students. A mean score of 3 was used. This was the mean of the responses (mean of means). The mean scores of all the items were summed and divided by the number of responses to get the mean of means. A mean score above 3 was considered as high level of academic resilience, while mean scores below 3 was considered as low level

of academic resilience. Details of the level of academic resilience are presented in Table 6.

Table 6: *Respondents' Level of Academic Resilience*

Sub-dimensions	**No. of items**	**Mean**	**SD**
Perseverance	14	2.86	.87
Reflective and adaptive help seeking	9	3.36	.56
Negative affect and emotional response	7	2.54	.67
Mean of means		**2.92**	**.70**

Source: Field Survey (2022)

The overall mean of respondents on academic resilience was, *M* = 2.92, *SD* = .70, out of 5.0. The criterion mean was 3.0 based on the five-point Likert scale used to gather responses (1+2+3+4+5/5). Thus, means lower than 3.0 indicated lower academic resiliency levels whiles means higher than 3.0 indicated higher academic resiliency levels. This implies that the respondents generally indicated that they were not academically resilient. Additionally, when the mean scores of the various dimensions were computed, it was evident that respondents had a higher 'reflective and adaptive help seeking component' (*M*=3.36, *SD*=.56). This implies that the respondents were very resilient in reflecting upon their strengths and weakness in order to succeed in their studies. Again, it meant that respondents agreed that they were highly capable of seeking help from others significant others such as lecturers in order to excel in their studies. However, the results revealed that the respondents had a lower 'perseverance' (*M*=2.86, *SD*=.87) which was characterized by the ability to study harder, not give up and look forward to

improvement of grades. Lastly, respondents also responded to possessing lower levels of the 'negative affect and emotional response' component (*M*=2.54, *SD*=.67). This implies that respondents had a lower academic resilience and that they could get depressed or disappointed at their poor results. Thus, they would not stop panicking when they failed.

Research Question 2: What is the level of academic engagement among postgraduate students at the University of Cape Coast?

This research question sought to determine the level of academic engagement among students. A 5-point Likert-type scale with 15 items was used to assess the academic engagement levels of students. A mean score of 3 was used. This was the mean of the responses (mean of means). The mean scores of all the items were summed and divided by the number of responses to get the mean of means. A mean score above 3 was considered as high level of academic engagement, while mean scores below 3 was considered as low level of academic engagement. Details of the level of academic engagement are presented in Table 7.

Table 7: *Respondents Level of Academic Engagement*

Sub-dimensions	**No. of items**	**Mean**	**SD**
Behavioural	5	2.08	1.32
Emotional	5	2.94	1.44
Cognitive	5	3.16	1.43
Mean of means		**2.72**	**1.39**

Source: Field Survey (2022)

The overall mean of respondents on academic engagement was, *M* = 2.72, *SD* = 1.39, out of 5.0. The criterion mean was 3.0 based on the five-point

Likert scale used to gather responses (1+2+3+4+5/5). Thus, means lower than 3.0 indicated lower academic engagement levels whiles means higher than 3.0 indicated higher academic engagement levels. This implies that the respondents generally indicated that they were not academically engaged. However, when the mean scores of the various dimensions were computed, it was evident that respondents had a higher 'cognitive engagement' (*M*=3.16, *SD*=1.43). This implies that the respondents generally agreed that they integrated the acquired knowledge in solving new problems and integrated subjects from different disciplines into their general knowledge. However, the respondents indicated that they had a lower 'emotional engagement' with their studies (*M*=2.94, *SD*=1.44). This implies that respondents had lower levels of academic engagement which was characterized by feeling accomplished at the university, feeling excited about and interested in the university's academic duties etc. Lastly, respondents also agreed to having a lower behavioural engagement' (*M*=2.08, *SD*=1.32). Thus, respondents did not generally put up an appropriate behaviour towards academic duties. Thus, most of them found it difficult to pay attention at the lecture room, presented their assignments late and did not participate effectively in group assignments.

Research Question 3: What is the level of academic burnout among postgraduate students at the University of Cape Coast?

This research question sought to determine the level of academic burnout among students. A 6-point Likert-type scale with 15 items was used to assess the academic engagement levels of students. A mean score of 3 was used. This was the mean of the responses (mean of means). The mean scores of all the items were summed and divided by the number of responses to get

the mean of means. A mean score above 3 was considered as high level of academic engagement, while mean scores below 3 was considered as low level of academic engagement. Details of the level of academic engagement are presented in Table 8.

Table 8: *Respondents Level of Academic Burnout*

Sub-dimensions	**No. of items**	**Mean**	**SD**
Exhaustion	5	5.54	.41
Cynicism	4	5.36	.36
Academic Efficacy	6	5.51	.39
Mean of means		**5.47**	**.38**

Source: Field Survey (2022)

The overall mean of respondents on academic burnout was, *M* = 5.47, *SD* = .38, out of 6.0. The criterion mean was 3.0 based on the five-point Likert scale used to gather responses (0+1+2+3+4+5+6/7). This implies that the respondents generally agreed that they experienced high academic burnout from their studies. Notably, academic efficacy was reverse coded in order to suit the total score for the burnout dimension. As such, higher scores indicated higher burnout levels. When the mean scores of the various dimensions were computed, it was evident that respondents had a higher 'exhaustion' (*M*=5.54, *SD*=.41). This implies that the respondents were emotionally drained with their studies and felt burned out from their studies. This was followed by 'academic efficacy' (*M*=5.51, *SD*=.41). Thus, respondents generally agreed that they could not make an effective contribution to the lectures they attended and did not feel confident that they could get things done. Lastly, respondents also agreed to feeling a higher level of cynicism (*M*=5.36, *SD*=.36). This

implies that respondents were less enthusiastic about their studies at the university and doubting the significance of their studies.

Hypothesis Testing

The study tested four hypotheses. Prior to testing these hypotheses, the normality assumption, which is fundamental to all parametric assumptions was tested using mean, median, 5% trimmed mean, and the normal Q-Q plot. Details of the results are presented in Table 9.

Table 9: *Test for Normality*

Parameters	Academic Resilience	Academic Engagement	Academic Burnout
Mean	133.6453	67.8717	82.2377
Standard deviation	4.70922	2.96165	3.16588
5% Trimmed mean	133.5094	67.8973	82.1342
Median	133.0000	68.0000	82.0000

As presented in Table 9, the mean, median, and 5% trimmed mean of the students' academic resilience, academic engagement and academic burnout were approximately equal. This implies that the distribution of scores of the aforementioned variables were normally distributed. Before the regression analysis for the first and second hypotheses were run, it was important to ensure that assumptions for running the regression analysis were met, especially taking into consideration the histogram plot showing the normality curve as well as the test of multicollinearity as well as the test for checking autocorrelation.

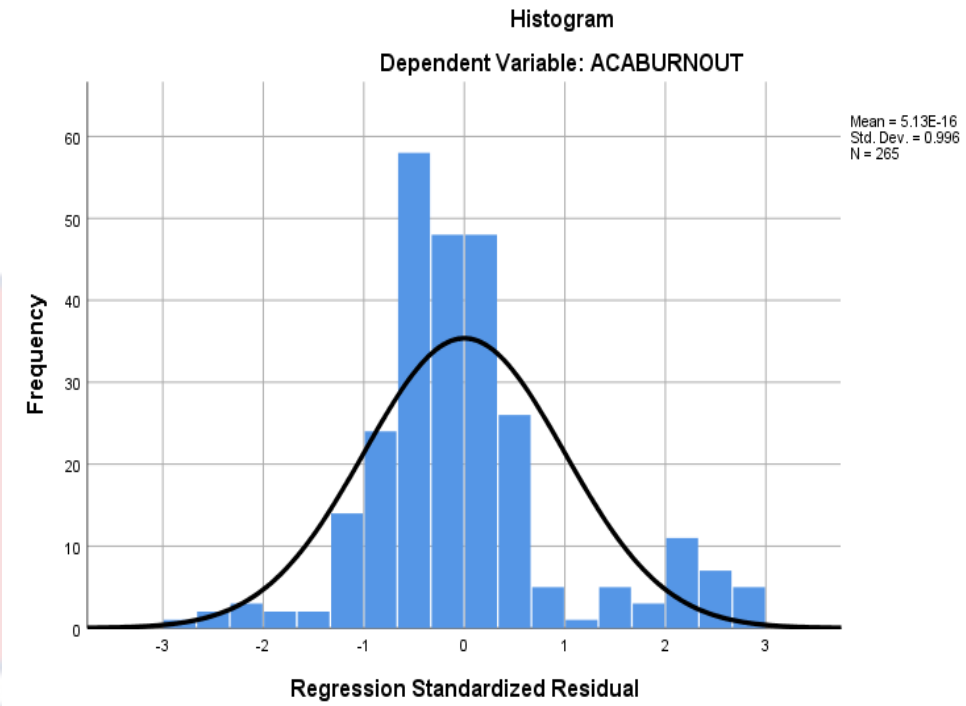

Figure 2: Normality Curve

Table 10: *Test for Multi-Collinearity*

	Collinearity Statistics	
	Tolerance	**VIF**
Academic Resilience	.984	1.016
Academic Engagement	.984	1.016

Dependent Variable: Academic burnout

Multicollinearity is a statistical concept where several independent variables in a model are correlated (Pallant, 2011). Multicollinearity is the occurrence of high intercorrelations among two or more independent variables in a multiple regression model. Multicollinearity can lead to skewed or misleading results when a researcher or analyst attempts to determine how well each independent variable can be used most effectively to predict or understand the dependent variable in a statistical model. In general,

multicollinearity can lead to wider confidence intervals that produce less reliable probabilities in terms of the effect of independent variables in a model. Generally, a VIF above 4 or tolerance below 0.25 indicates that multicollinearity might exist, and further investigation is required. When VIF is higher than 10 or tolerance is lower than 0.1, there is significant multicollinearity that needs to be corrected. Looking at the Tolerance (.984) and VIF (1.016) statistics from the table, it indicates that there is no multicollinearity existing among the independent variables.

Table 11: *Test for Autocorrelation*

Model	R	R Square	Durbin-Watson
1	.274	0.75	1.688

a. Predictors: (Constant), Resilience, Academic Engagement

b. Dependent Variable: Academic Burnout

The Durbin-Watson statistic is commonly used to test for autocorrelation (Pallant, 2011). It can be applied to a data set by statistical software. The outcome of the Durbin-Watson test ranges from 0 to 4. An outcome close to 2 or approximately 2 means there is little or no autocorrelation. i.e., a thumb rule of (1.5<d>2.5) indicates no autocorrelation. However, an outcome closer to 0 suggests a stronger positive autocorrelation and an outcome closer to 4 suggests a stronger negative autocorrelation. A Durbin-Watson value below 1 or above 3 could render an analysis invalid as it indicates the presence of autocorrelation. From table 11, it can be observed that there is no indication of autocorrelation (1.688).

Hypothesis 1

$H_0$1: Academic resilience will not predict academic burnout amongst postgraduate students of University of Cape Coast.

H_A1: Academic resilience will predict academic burnout amongst postgraduate students of University of Cape Coast.

Research hypothesis 1 aimed at testing if academic resilience could predict academic burnout or not. Both simple and multiple linear regressions were deemed appropriate to determine the extent to which academic resilience predicted academic burnout, taking into consideration all the three dimensions of academic resilience (perseverance, reflective and adaptive help seeking and negative affect and emotional response) as well as their combined effects. Tables 12 and 13 show the correlation results between the predictor variable and the criterion variable as well as the correlation between the subscales of the predictor variable and the criterion variable respectively. Tables 14 and 15 show the multiple regression results between the predictor variable and the criterion variable as well as the regression results between the subscales of the predictor variable and the criterion variable respectively.

Table 12: *Correlation between Academic Resilience and Academic Burnout*

		Academic burnout	**Resilience**
Pearson Correlation	Academic burnout	1.000	-.177
	Resilience	-.177	1.000
Sig. (1-tailed)	Academic burnout	.	.002
	Resilience	.002	.

Source: Field Survey (2022)

Table 12 presents the correlation analysis between academic resilience and academic burnout. The correlation analysis revealed that there was a

statistically significant relationship between academic resilience and academic burnout, r=-.177, p=.002. This represents a weak negative relationship between academic resilience and academic burnout. This means that as academic resilience increased, academic burnout decreased and vice-versa.

Table 13: *Correlations between Academic Resilience (Sub-Scales) and Academic Burnout*

		Acaburn	**Pers**	**RAHS**	**NAER**
Pearson Correlation	Acaburn	1.000	-.185	-.090	-.006
	Pers	-.185	1.000	.131	-.152
	RAHS	-.090	.131	1.000	.109
	NAER	-.006	-.152	.109	1.000
Sig. (1-tailed)	Acaburn	.	.001	.071	.459
	Pers	.001	.	.017	.007
	RAHS	.071	.017	.	.038
	NAER	.459	.007	.038	.

Acaburn=Academic burnout, Pers= Perseverance, RAHS= Reflective and adaptive help seeking, NAER= Negative affect and emotional response
Source: Field Survey (2022)

Table 13 presents the correlation analysis between the subscales of academic resilience (perseverance, reflective and adaptive help seeking and negative affect and emotional response) and academic burnout. The correlation analysis revealed that there was a statistically significant relationship only between perseverance and academic burnout, r=-.185, p=.001. This indicates a weak negative relationship between perseverance and academic burnout. This means that as perseverance decreased, academic burnout increased and vice-versa. All other correlations were not statistically significant at .05 level.

Table 14: *Academic Resilience as a predictor of Academic Burnout*

Variables	**B**	**R^2**	***SE B***	***B***	***t***	***P***
Constant	98.118	.031	5.456		17.982	.000
Academic Resilience	-.119		.041	-.177	-2.912	.004

F=8.481 df= (263)

Source: Field Survey, 2022

Table 14 shows a simple linear regression analysis conducted to analyse the data and test the hypothesis. A linear regression model was conducted to find out how academic resilience predicted academic burnout. The study results revealed that academic resilience predicted academic burnout, B= .119, F (263) = 8.481, p=.004. The model accounted for 3.1% of the variation in academic burnout such that a unit increase in academic resilience results in a .119 decrease in academic burnout. Therefore, individuals with lower academic resilience experience higher academic burnout. Since academic resilience significantly predicted academic burnout, the null hypothesis which states that "*Academic resilience will not predict academic burnout amongst postgraduate students of the University of Cape Coast*" is rejected.

Table 15: *Academic Resilience (Sub-Scales) as predictors Academic Burnout*

Variables	B	R^2	*SE B*	*B*	*t*	*P*
Constant	98.966	.039	5.816		17.017	.000
Perseverance	-.192		.066	-.181	-2.917	.004
Reflective and adaptive help seeking	-.089		.086	-.064	-1.033	.302
Negative affect and emotional response	-.040		.092	-.027	-.435	.664

F=3.577 df= (263)

Source: Field Survey, 2022

Table 15 indicates results on a multiple linear regression analysis conducted to predict academic burnout based on academic resilience (perseverance, reflective and adaptive help seeking and negative affect and emotional response). The table shows that a significant regression equation was found. The study results revealed that the model predicted academic burnout, F (263) = 3.577, p=.000. The model accounted for 3.9% of the variation in academic burnout. This means that the model was responsible for 3.9% of the differences in students' academic burnout. In addition, the perseverance subscale predicted academic burnout such that a unit increase in perseverance accounted for .192 decrease in academic burnout. Individuals with lower perseverance experienced higher academic burnout. However, reflective and adaptive help seeking and negative affect and emotional response did not predict academic burnout.

Hypothesis 2

$H_0$2: Academic engagement will not predict academic burnout amongst postgraduate students of University of Cape Coast.

H_A2: Academic engagement will predict academic burnout amongst postgraduate students of University of Cape Coast.

Research hypothesis two aimed at testing if academic engagement predicted academic burnout or not. Both simple and multiple linear regressions were deemed appropriate to determine the extent to which academic engagement predicted academic burnout, taking into consideration all the three dimensions of academic engagement (behavioural, emotional and cognitive) as well as their combined effects. Tables 16 and 17 show the correlation results between the predictor variable and the criterion variable as

well as the correlation between the subscales of the predictor variable and the criterion variable respectively. Tables 18 and 19 show the multiple regression results between the predictor variable and the criterion variable as well as the regression results between the subscales of the predictor variable and the criterion variable respectively.

Table 16: *Correlation between Academic Engagement and Academic Burnout*

		Academic burnout	**Academic Engagement**
Pearson Correlation	Academic burnout	1.000	-.230
	Academic Engagement	-.230	1.000
Sig. (1-tailed)	Academic burnout	.	.000
	Resilience	.000	.

Source: Field Survey (2022)

Table 16 presents the correlation analysis between academic engagement and academic burnout. The correlation analysis revealed that there was a statistically significant relationship between academic resilience and academic burnout, r=-.230, p=.000. The results show a weak negative relationship between academic engagement and academic burnout. This means that as academic engagement decreased, academic burnout increased and vice-versa.

Table 17: *Correlations between Academic Engagement (Sub-Scales) and Academic Burnout*

		Acaburn	**Beh**	**Emo**	**Cog**
Pearson Correlation	Acaburn	1.000	-.248	-.057	-.052
	Beh	-.248	1.000	-.162	.162
	Emo	-.057	-.162	1.000	-.164
	Cog	-.052	.162	-.164	1.000
Sig. (1-tailed)	Acaburn	.	.000	.177	.200
	Beh	.000	.	.004	.004
	Emo	.177	.004	.	.004
	Cog	.200	.004	.004	.

Acaburn=Academic burnout, Beh= Behavioural, Emo= Emotional, Cog= Cognitive
Source: Field Survey (2022)

Table 17 presents the correlation analysis between the subscales of academic engagement (behavioural, emotional and cognitive) and academic burnout. The correlation analysis revealed that there was a statistically significant relationship only between behavioural engagement and academic burnout, r=-.248, p=.000. The results indicate a weak negative relationship between behavioural engagement and academic burnout. This means that as behavioural engagement decreased, academic burnout increased and vice-versa. All other correlations were not statistically significant at .05 level.

Table 18: *Academic Engagement as a predictor of Academic Burnout*

Variables	**B**	**R^2**	***SE B***	***B***	***t***	***P***
Constant	98.913	.053	4.358		22.696	.000
Academic Engagement	-.246		.064	-.2.30	-3.830	.000

F=14.668 df= (263)

Source: Field Survey, 2022

Table 18 indicates a simple linear regression analysis conducted to analyse the data and test the hypothesis. A linear regression model was conducted to find out how academic engagement predicted academic burnout. The study results revealed that academic engagement predicted academic burnout, B= .246, F (1,263) = 14.668, p=.000. The model accounted for 5.3% of the variation in academic burnout such that a unit increase in academic engagement resulted in a .246 decrease in academic burnout. Therefore, individuals with lower academic engagement experienced higher academic burnout. Since academic engagement significantly predicted academic burnout, the null hypothesis which states that "*Academic engagement will not predict academic burnout amongst postgraduate students of University of Cape Coast*" is rejected.

Table 19: *Academic Engagement (Sub-Scales) as predictors of Academic Burnout*

Variables	**B**	**R^2**	***SE B***	***B***	***t***	***P***
Constant	96.762	.072	4.996		19.368	.000
Behavioural	-.416		.097	-.261	-4.274	.000
Emotional	-.144		.085	-.104	-1.699	.091
Cognitive	-.077		.175	-.027	-.439	.661

F=3.577 df= (261)

Source: Field Survey, 2022

Table 19 indicates results on a multiple linear regression analysis conducted to predict academic burnout based on academic engagement (behavioural, emotional and cognitive engagement). The table shows that a significant regression equation was found. The study results revealed that the model predicted academic burnout, F (261) = 3.577, p=.000. The model accounted for 7.2% of the variation in academic burnout. This means that the model is responsible for 7.2% of the differences in students' academic burnout. In addition, the behavioural engagement subscale predicted academic burnout such that a unit increase in behavioural engagement accounted for .416 decrease in academic burnout. Individuals with lower behavioural engagement experienced higher academic burnout. However, emotional and cognitive engagement did not predict academic burnout.

Hypothesis 3

$H_0$3: There is no statistically significant difference between academic burnout of male and female postgraduate students of University of Cape Coast.

H_A3: There is a statistically significant difference between academic burnout of male and female postgraduate students of University of Cape Coast.

At 0.05 alpha level of significance, hypothesis three was tested to find out whether gender differences existed in the academic burnout levels among postgraduate students at the University of Cape Coast. The independent samples t-test was deemed appropriate for the analysis. This was based on the assumption that, the hypothesis sought to find out whether a statistically significant difference existed between the means in two different groups (male and female students' academic burnout). The independent variables were male and female postgraduate students while the dependent variable was academic

burnout. Prior to the analysis, the Levene's test for homogeneity of variances was carried out to check whether equality of variances was assumed or not and the results were presented in Table 20.

Table 20: *Levene's Test for Equality of Variances*

	F	Sig.	T	Df	Sig. (2 tailed)
Equal variances assumed	2.532	.113	.914	263	.362
Equal variances not assumed			.958	223.077	.339

Source: Field Survey (2022)

From Table 20, it can be observed that the significant value of .113 is above .05. This means that equal variances were assumed. Table 21 further presented the actual analysis, testing the differences between the two groups with regards to the dependent variable (academic burnout).

Table 21: *Gender Differences in Students' Academic Burnout*

Gender	N	M	SD	Df	t-value	p-value
Male	170	82.3706	3.34386	263	.914	.362
Female	95	82.0000	2.82089			

The analysis in Table 21 shows that there is no statistically significant difference between the academic burnout of male and female students, t (263) = .914, p=.362, which is greater than the sig. value of 0.05. This means that Males (M= 82.3706, SD=3.34386) did not differ significantly from females (M=82.0000, SD= 2.82089) with regards to the rate at which they experience

academic burnout from their studies. Thus, academic burnout was experienced equally such that neither male nor female postgraduate students experience a higher academic burnout than the other. Based on this result, the null hypothesis, which states that "*there is no statistically significant difference between academic burnout of male and female postgraduate students of University of Cape Coast"* is retained.

Hypothesis 4

$H_0$3: There is no statistically significant difference between academic burnout of level 800 and 900 postgraduate students of University of Cape Coast.

H_A3: There is a statistically significant difference between academic burnout of level 800 and 900 postgraduate students of University of Cape Coast.

At 0.05 alpha level of significance, hypothesis four was tested to find out significant differences in academic burnout levels between level 800s and 900s. The independent samples t-test was deemed appropriate for the analysis. This is based on the assumption that, the hypothesis sought to find out whether statistically significant differences exist between the means in two different groups (level 800 and level 900 postgraduate students' academic burnout). The independent variables were level 800s and 900s while the dependent variable was academic burnout. Prior to the analysis, the Levene's test for homogeneity of variances was carried out to check for equality of variances and the results were presented in Table 22.

Table 22: *Levene's Test for Equality of Variances*

	F	Sig.	T	Df	Sig. (2 tailed)
Equal variances assumed	7.662	.006	-1.486	263	.138
Equal variances not assumed			-.1.294	108.984	.198

Source: Field Survey (2022)

From Table 22, it can be observed that the significant value of .006 is below .05 at the significant level. This means that equal variances were not assumed. Table 23 further presented the actual analysis, testing the differences between the two groups with regards to the dependent variable (academic burnout).

Table 23*: Academic Level Differences in Students' Academic Burnout*

Academic Level	N	M	SD	Df	t-value	p-value
800	188	82.0532	2.79176			
				108.984	-1.294	.198
900	77	82.6883	3.91777			

*Significant at .05 level

The analysis in Table 23 shows that no statistically significant difference between academic burnout of level 800 and 900 postgraduate students of University of Cape Coast. The results of the analysis thus revealed no statistically significant difference between level 800s and 900s, t (108.984) = -1.294, p=.198, which is greater than the sig. value of 0.05. This means that level 800s (M= 82.0532, SD=2.79176) did not differ significantly from level

900s (M=82.6883, SD= 3.91777) with regards to the rate at which they experience academic burnout from their studies. This can be further interpreted as both level 800s and level 900s facing a similar fate or equal academic burnout from their studies. Thus, academic burnout is experienced similarly for both academic levels and neither level 800 postgraduate students nor level 900 postgraduate students experience a higher academic burnout than the other. Based on this result, the null hypothesis, which states that "*there is no statistically significant difference in the academic levels of postgraduate students with respect to their academic burnout"* is retained.

Discussion of Results

The purpose of this study was to investigate academic resilience and academic engagement as predictors of academic burnout among postgraduate students at the University of Cape Coast. This section discusses the results of the study as presented in the previous paragraphs. The discussion was organised based on the seven objectives of the study.

Levels of Academic Resiliency of Postgraduate Students

The first objective of the study was to find out the academic resiliency levels among postgraduate students at the University of Cape Coast. Among the various dimensions, postgraduate students had a higher 'reflective and adaptive help seeking' component as compared to the other dimensions. This implies that postgraduate students were very resilient in reflecting upon their strengths and weaknesses in order to succeed in their studies. However, the dimensions of 'perseverance' and 'negative affect and emotional response' were very low amongst postgraduate students. Overall, the findings of the study revealed that majority of postgraduate students indicated that they were

not academically resilient. A possible explanation to this cause could be that most postgraduate students were usually working whiles embarking on their academic journey. Thus, the extent to which they put much effort in balancing their studies as well as their work might have had an effect on the extent to which they believed they could overcome the academic challenges they faced. For instance, risk factors that affect academic resilience includes anxiety, stress, trauma, social barriers, negative friends, individual conflict attitudes, low satisfaction in relationships with family, having family responsibilities, refusing school, low commitment to school, have a loan, and work full time, etc. Since postgraduate students have completed their undergraduate degrees, it is likely that most of them may be older and married and may have other responsibilities to fulfil other than their academic requirements. This was likely to reduce the extent to which they believed that they could overcome adversities in their educational journey and still succeed.

This finding is in line with a study by Abubakar et al. (2021) which revealed that there was a low rate of academic resilience amongst students. This study's finding is also in line with the study findings by Olodude, Anuodo and Owoeye who also recorded low to moderate academic resilience amongst students. The aforementioned studies revealed that students did not possess higher levels of academic resilience and this could result from several of the aforementioned risk factors that affect academic resilience such as having family responsibilities, having a full-time work etc.

However, the finding of this study contradicts with the findings by Singh (2021) that students possessed higher levels of academic resilience. Again, the findings of this study do not corroborate the findings of Hwang and

Shin (2018) who reported higher academic resilience among students. Also, the findings of this study is not consistent with the findings of (Erdogan, Ozdogan & Erdogan, 2015) which showed that there was high academic resilience levels among students. The possible reason to this dissimilarity could be that the students used in both studies were from two distinct educational environments, hence the difference.

In summary, the study's findings showed that majority of postgraduate students indicated that they were not academically resilient. This could be explained by the Resiliency Theory which states that academic resilience results from the utilization of protective factors by students to manage adversities and come out of their academic hassles.

Level of Academic Engagement amongst Postgraduate students

One of the sub-purposes of this study was to find out the level of academic engagement among postgraduate students of the University of Cape Coast. The result of the study revealed that postgraduate students had a higher level 'cognitive engagement'. This implied that the respondents generally agreed that they integrated the acquired knowledge in solving new problems and integrated subjects from different disciplines into their general knowledge. However, the 'emotional engagement' and 'cognitive engagement' dimensions were not high. It was noted however overall, that, postgraduate students had a lower academic engagement. This means that postgraduate students were not fully engaged with their studies. This is likely to reduce the extent to which they are engaged with their studies. Most often, postgraduate students may spend more time at their workplace and less time on campus with some even missing lectures due to their busy schedules.

The finding of this study agrees with a couple of studies (Kusurkar et al., 2021; Shaari et al., 2014; Hartono, Umamah & Sumarno, 2019). The findings of the aforementioned studies revealed that students had lower levels of academic engagement. This was likely to have resulted from the busy schedules of students which had the tendency to shift their attention and focus from their academic duties.

In contrast with the findings of this study, Delfino (2019) found high academic engagement among students. Delfino found that student participation in behavioural, emotional, and cognitive activities was high. Thus, students were totally engaged with their studies in all three dimensions. Again, Essiam (2019) in Ghana also recorded high academic engagement amongst university students. It was observed that students took part in activities that required them to study to satisfy the expectations of their lecturers. Thus, students were highly involved with their studies. The disparity in the findings could be due to the fact that undergraduate students were used in the study and most of them are not working or having other family demands to fulfil as compared to postgraduate students.

In summary, the study's findings showed that majority of postgraduate students indicated that they were not academically engaged. This can be explained in line with the Theory of Student Involvement which posits that students' involvement with their studies requires an investment of psychosocial and physical energy. Thus, when postgraduate students are not able to invest such energies into their studies, it means that they are not engaged with their studies.

Level of Academic Burnout among Postgraduate Students

The third objective of the study was to find out the level of academic burnout among postgraduate students at the University of Cape Coast. The findings of this study revealed that majority of the postgraduate students used for the study experienced academic burnout. The findings of the study revealed that postgraduate students scored higher means on all dimensions of the academic burnout scale indicating that they were burned out from their studies. Thus, they had high 'exhaustion' which meant that they were emotionally drained with their studies and felt burned out from their studies. Moreover, they could not make an effective contribution to the lectures they attended and did not feel confident that they could get things done. Lastly, they also agreed to have felt a high level of cynicism which meant that they became less enthusiastic about their studies at the university and doubted the significance of their studies. Overall, the findings showed that postgraduate students were academically burnout from their studies to a very high extent. This could have resulted from their schedules and high demands associated with postgraduate studies such as balancing work with studies.

The finding of the study is in line with the studies by (Kristanto, Chen & Thoo, 2016; Haile et al., 2019; Sufia & Latif, 2016) who discovered that students had higher levels of academic burnout rates from their studies. It was revealed in some of these studies that more than one-third of university students experienced academic burnout and it was recommended that individual and organizational level interventions should be aimed at students who lacked social support, were dissatisfied with their lecturers or were unhappy with their education.

However, the finding of this study contradicts with the finding by Kaggwa et al. (2021) that university students had lower levels of academic burnout. This might be due to appropriate interventions by the institution to regulate the stress and frustrations that students went through. Again, the findings of the study are not consistent with the findings of Vidhukumar and Hamza (2020) that majority of university students in their study had a moderate level of academic burnout. Thus, interventions by their academic institution to manage burnout in their study may be the evidence for the disparity in findings of the present study.

In summary, based on the means of mean and the standard deviation scores, the main findings of the study revealed that majority of students faced severe burnout from their studies.

Academic Resilience as a predictor of Academic Burnout

The fourth objective of the study was to examine how academic resilience predicted academic burnout among postgraduate students. Both simple as well as multiple linear regression analysis were run to find out the individual effects (sub-dimensions of academic resilience) as well as the combined effects of the independent variable (academic resilience) on the dependent variable (academic burnout). Taking into consideration the sub-dimensions of the academic resilience scale, the study found that perseverance was the only significant predictor of academic burnout amongst all the three sub-dimensions of academic resilience. Moreover, the study found a weak inverse association between perseverance and academic burnout. This implied that as perseverance increased, academic burnout decreased and vice versa. Thus, perseverance and academic burnout were negatively correlated. Overall,

the study found that there was a weak inverse association between academic resilience and academic burnout. This implied that as academic resilience increased, academic burnout decreased and vice-versa. Furthermore, a simple linear regression model was used to analyse how academic resilience predicted academic burnout amongst postgraduate students. A statistically significant regression equation was found. According to the findings, academic resilience was a significant predictor of academic burnout. The model accounted for 3.1% of the variation in academic burnout such that a unit increase in academic resilience resulted in a .119 decrease in academic burnout. Therefore, individuals with higher academic engagement experienced lower academic burnout. Hence, postgraduate students with lower academic resilience were likely to experience higher academic burnout.

The study findings are consistent with findings of several studies such as (Oyoo, Mwaura & Kinai, 2018; Romano et al., 2021). These studies found that academic resilience significantly predicted academic burnout and notably there was a negative correlation existing between academic resilience and academic burnout. Thus, as students had lower levels of academic resilience, it resulted in higher levels of academic burnout and as they had higher levels of academic burnout, it resulted in lower academic resilience. Again, the study findings corroborated the findings of studies by (Bahrami, Amiri & Abdollahi, 2017; Lee, 2019) that academic resilience significantly predicted academic burnout and moreover, a negative correlation existed between academic resilience and academic burnout.

On the contrary, the finding of this study was inconsistent with the finding of Trigueros et al. (2020) who found out that there was a significant

positive relationship between academic resilience and academic burnout. In their study, they found a positive correlation instead of a negative correlation between academic resilience and academic burnout. This disparity between the findings of this study and the findings of the current study might result from the adoption of a non-probability sampling technique in the study by Trigueros et al. (2020).

In summary, academic resilience was a significant predictor of academic burnout, and there was a negative relationship between the two. This can be explained in line with the Demands and Resources Theory which posits that when one's demands (academic challenges) become unbearable, their resources (ability to deal with it) reduce. Thus, when postgraduate students are not able to effectively meet their academic demands, their resources such as being academic resilient will reduce.

Academic Engagement as a predictor of Academic Burnout

The fifth objective of the study was to examine how academic engagement predicted academic burnout among postgraduate students. Both simple as well as multiple linear regression analyses were run to find out the individual effects (sub-dimensions of academic engagement) as well as the combined effects of the independent variable (academic resilience) on the dependent variable (academic burnout). Taking into consideration the sub-dimensions of the academic engagement scale, the study found that behavioural engagement was the only significant predictor of academic burnout amongst all the three sub-dimensions of academic engagement. Moreover, the study found a weak inverse association between behavioural engagement and academic burnout. This implies that as behavioural

engagement increased, academic burnout decreased and vice versa. Thus, behavioural engagement and academic burnout were negatively correlated. Overall, the study found out that there was a weak inverse association between academic engagement and academic burnout. This implies that as academic engagement increased, academic burnout decreased and vice-versa. Furthermore, a simple linear regression model was used to analyse how academic engagement predicted academic burnout amongst postgraduate students. A statistically significant regression equation was found. According to the findings, academic engagement was a significant predictor of academic burnout. The model accounted for 5.3% of the variation in academic burnout such that a unit increase in academic engagement resulted in a .246 decrease in academic burnout. Therefore, individuals with high academic engagement experienced a low academic burnout. Hence, postgraduate students with low academic engagement were likely to experience high academic burnout.

The study findings are consistent with several studies such as (Ghadampour, Farhadi & Naghibeiranvand, 2016; An et al., 2017). These studies found academic engagement significantly predicted academic burnout and notably there was a negative correlation between academic engagement and academic burnout. Thus, as students had low levels of academic engagement, it resulted in high levels of academic burnout and as they had high levels of academic burnout, it resulted in low academic engagement. Again, the study findings corroborated the findings of Gómez et al. (2015) and Singh, Kumar and Srivastava (2020) who also found out that academic engagement significantly predicted academic burnout and moreover, a

negative correlation existed between academic engagement and academic burnout.

On the contrary, the finding of this study was not in agreement with the findings of Salmela-Aro and Read (2017) who found a significant positive relationship between academic engagement and academic burnout. This disparity between the findings of Salmela-Aro and Read (2017) and the findings of the current study may be resulting from the adoption of students with engaged-exhausted profiles. The engaged-exhausted students experienced emotional exhaustion simultaneously with academic engagement in their study.

In summary, academic engagement was a significant predictor of academic burnout, and, there was a negative relationship between the two. This can be underpinned by the Demands and Resources Theory which posits that when one's demands (academic challenges) become unbearable, they affect their ability to be fully engaged. Thus, when postgraduate students are not able to effectively meet their academic demands, it is likely to deplete their commitment towards their studies.

Gender Differences in Academic Burnout

The sixth objective of the study was to examine differences between the academic burnout of male and female postgraduate students. The study found that male and female postgraduate students did not vary in terms of the level of academic burnout they experienced. That is, both genders experienced the same level of academic burnout. This finding is consistent with the findings by Onuoha and Akintola (2016), and Ogbueghu et al. (2019) that there were no gender differences in academic burnout.

However, the findings of this study were not consistent with (Paidar, Amirhooshangi & Taghavi, 2017) who discovered that male students were usually prone to academic burnout from their studies than their female counterparts. The possible reason for this contradiction could be that male students did not possess resilience in tackling burnout as compared to their female counterparts.

Differences in Academic burnout with respect to Academic levels

The last objective of the study was to examine differences between academic burnout of level 800 and 900 postgraduate students. The study found that level 800 and 900 postgraduate students did not vary in terms of the level of academic burnout they experienced. That is, both postgraduate students from level 800 and 900 experienced academic burnout equally. This finding is consistent with the finding by Salgado and Au-Yong-Oliveira (2021) that there were no differences in academic burnout with respect to one's academic level. The possible reason in consistency could be that at the postgraduate level, both first year masters students and doctoral students are well motivated in their studies. Hence, both first year masters and doctoral students experienced an equal measure of burnout.

However, the findings of this study were not consistent with a study by Sunawan et al. (2021) who found in their study that students did differ in the level of academic burnout based on their academic levels. Also, there was a sharp contrast in findings according to the study conducted by (Morales-Rodríguez, Pérez-Mármol & Brown, 2019) who discovered that students did differ in the level of academic burnout based on their academic levels. The

possible reason for this inconsistency could be due to the difference in geographical settings.

Chapter Summary

The study examined academic resilience and academic engagement as predictors of academic burnout. This chapter reported the results and discussion of the study. The results of the study showed that postgraduate students had a low academic resilience and academic engagement. On the other side, it was revealed that postgraduate students experienced high levels of academic burnout. This study further found that academic resilience was a significant predictor of academic burnout and there was a negative correlation between academic resilience and academic burnout. However, among the three sub-dimensions of academic resilience, it was found that only perseverance was a significant predictor of academic burnout. Again, the study revealed that academic engagement was a significant predictor of academic burnout and there was a negative correlation between academic engagement and academic burnout. However, among the three sub-dimensions of academic engagement, it was found that only the behavioural engagement dimension predicted academic burnout. With the gender differences in academic burnout, it was found that there was no statistically significant difference between academic burnout of male and female postgraduate students of University of Cape Coast. Lastly, the findings of the study revealed that there was no statistically significant difference between the academic burnout of level 800 and level 900 postgraduate students.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents a summary of the study, the conclusions, recommendations and suggestions for further studies. The recommendations and suggestions for further studies were based on the findings of the study.

Summary

Overview of the study

The study examined the academic resilience and academic engagement as predictors of academic burnout among postgraduate students at the University of Cape Coast in Ghana. The study was guided by seven objectives which were transformed into three research questions and four hypotheses. The descriptive survey design, specifically, the survey design, with a quantitative approach was employed in the conduct of the study. The population of this study comprised 847 regular postgraduate students (Level 800 and 900) of the University of Cape Coast. Through the stratified and simple random sampling technique, questionnaires were administered to 295 regular postgraduate students. 265 questionnaires were however filled and returned, this resulted in a 90% response rate. Hence, all the analyses were based on the 265 respondents. The questionnaires had good indicators of internal consistency, $\alpha = .70$ and above. The data collected were analysed using means and standard deviations, simple linear regression, multiple linear regression analysis and the independent samples t-test.

Key findings

The study revealed the following findings:

1. The study revealed that regular first-year postgraduate students belonging to the various colleges in the University of Cape Coast had lower academic resilience. However, among the three sub-dimensions of academic resilience, the reflective and adaptive help seeking sub-dimension were higher than the other sub dimensions.
2. Findings from the study also revealed that regular first-year postgraduate students in the University of Cape Coast had lower academic engagement. However, among the three sub-dimensions of academic resilience, the cognitive engagement sub-dimension were higher than the other sub dimensions.
3. It was also found that regular first-year postgraduate students in the University of Cape Coast had higher academic burnout. Notably, among the sub-dimensions of academic burnout, respondents experienced higher levels of academic burnout among all the three dimensions (Exhaustion, Cynicism and Academic Efficacy).
4. The findings of the study also revealed that academic resilience significantly predicted academic burnout and there was a negative correlation between academic resilience and academic burnout. Notably, perseverance was the only sub-dimension of academic resilience which predicted academic burnout.
5. The findings of the study also revealed that academic engagement significantly predicted academic burnout and there was a negative correlation between academic resilience and academic burnout. Notably,

behavioural engagement was the only sub-dimension of academic engagement that predicted academic burnout.

6. The study found no statistically significant difference between the academic burnout of male and female postgraduate students. Thus, the experience of academic burnout was equal for both male and female postgraduate students at the University of Cape Coast.
7. The study found no statistically significant difference between the academic burnout of level 800 and 900 postgraduate students. Thus, the experience of academic burnout was equal for both level 800 and 900 postgraduate students at the University of Cape Coast.

Conclusions

Based on the outcomes of this study, it is possible to infer that most postgraduate students at the University of Cape Coast have a poor degree of academic resilience. As a result, the majority of first-year postgraduate students at the University of Cape Coast, which offers master's and doctorate degrees, stated that they lacked the resilience required to overcome setbacks faced during their academic path. This information suggests that postgraduate students at the University of Cape Coast were pessimistic about their ability to overcome hurdles in their studies. Academic engagement was poor among postgraduate students at the University of Cape Coast. As a result, the majority of first-year postgraduate students at the University of Cape Coast, which offers master's and doctorate degrees, said they were not interested in their studies. Furthermore, because they scored high on all components of the academic burnout scale, the majority of first-year postgraduate students stated they were extremely burnt out from their academics.

Academic resilience was found to be a strong predictor of academic burnout. Perseverance, as a sub-dimension, predicted academic burnout adversely. The most notable finding was that there was a negative relationship between academic resilience and academic burnout. when a result, when academic resilience declines, academic burnout rises, and vice versa. Academic involvement, once again, strongly predicted academic burnout. Specifically, as a subdimension, behavioural engagement predicted academic burnout adversely. The most relevant finding was that there was a negative relationship between academic engagement and academic fatigue. while a result, while academic engagement declines, academic burnout rises, and vice versa.

There was no statistically significant difference between genders in academic burnout among postgraduate students. It was discovered that both male and female students experience academic burnout in the same way. Finally, the study revealed that there was no statistically significant difference in academic burnout among postgraduate students based on education level. It was discovered that both level 800 and 900 students experienced academic burnout in the same way.

Recommendations

Based on the findings of the study and the conclusion drawn, the following recommendations were made to guide the development of policy and practice:

1. Based on the findings, it is recommended that management of University of Cape Coast in collaboration with the Guidance and Counselling centre should put measures in place to assist postgraduate

students develop their academic resilience as their academic resiliency levels were low.

2. Again, it is recommended that lecturers at the University of Cape Coast should find new ways and strategies to make sure that postgraduate students are fully engaged with their studies through innovative pedagogical techniques.
3. It is also recommended that management of the University put policies in place to ensure that academic burnout is reduced among postgraduate students as it has implications on their academic resilience and academic engagement. Thus, some recreational programme could be set up as part of the semester activities to help students manage their burnout levels.
4. It is also recommended that both males and female postgraduate students should be exposed to programme and workshops on how to manage their academic burnout levels as both male and female postgraduate students experienced academic burnout equally.
5. It is also recommended that both level 800 and 900 postgraduate students should be exposed to seminars on how to manage their academic burnout levels as both masters and doctoral students experienced academic burnout equally.

Suggestion for Further Research

1. The research approach can be enhanced by employing both the quantitative and qualitative research approach thus mixed method approach to better comprehend issues revolving around academic resilience, academic engagement and academic burnout.

2. The study can potentially be repeated in other Universities in Ghana to determine how academic resilience and academic engagement predicts academic burnout. This will help to make the findings more comprehensive and all-embracing.

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APPENDICES

APPENDIX A

UNIVERSITY OF CAPE COAST

COLLEGE OF EDUCATION STUDIES

DEPARTMENT OF EDUCATION AND PSYCHOLOGY

QUESTIONNAIRE

This questionnaire is designed to gather information on 'Academic Resilience and Academic Engagement as Predictors of Academic Burnout among Postgraduate Students at the University of Cape Coast. Information given is solely for academic purpose. Participation is voluntary, and also the respondent is assured that no information will be revealed to any third party without their consent. Thank you.

SECTION A

DEMOGRAPHIC INFORMATION

Please you are required to tick the appropriate responses.

1. **Gender**

   Male [ ] Female [ ]

2. **College of Study**

   COES [ ] COHAS [ ] COHLS [ ] CANS [ ]

3. **Level of Education**

   800 [ ] 900 [ ]

SECTION B

ACADEMIC RESILIENCE

Please indicate by ticking the extent to which you agree with the following statements

1= Unlikely, 2= Somewhat unlikely, 3= Neutral, 4= Somewhat likely, 5= Likely

	Statements	**1**	**2**	**3**	**4**	**5**
	Perseverance					
1	I would study harder to achieve my goals.					
2	I would keep trying when I fail to achieve my targets.					
3	I would use the feedback from others to improve my academics.					
4	I would just give up in the face of academic challenges					
5	I would try to think of new solutions in solving academic challenges.					
6	I would change my study plans when I am having academic challenges.					
7	I would use challenging circumstances to motivate myself.					
8	I would not change my long-term goals and ambitions.					
9	I would see the tough situations as a challenge.					
10	I would look forward to showing that I can improve my grades.					
11	I would see the difficult circumstances as temporary.					
12	I would do my best to stop thinking of failing.					
13	I would not blame the lecturer for my poor results.					

14	I would accept the lecturers' feedback.					
	Reflective and adaptive help seeking					
15	I would try to think more about my strengths and weaknesses to help me work better.					
16	I would give myself encouragement					
17	I would seek encouragement from my family and friends.					
18	I would try different ways to study.					
19	I would set my own goals for achievement.					
20	I would seek help from my lecturers					
21	I would start to monitor and evaluate my achievements and efforts.					
22	I would start to self-impose rewards and punishments depending on my performance					
23	I would use my past successes to help motivate myself					
	Negative Affect and emotional response					
24	I would not feel like everything was ruined and was going wrong when I get poor grades.					
25	I would not begin to think my chances of success at university were poor.					
26	I would not probably get depressed over poor results.					
27	I would not be very disappointed at poor results.					
28	I would not begin to think my chances of getting the job I want were poor when I do not succeed at the university.					
29	I would not probably get annoyed when I fail.					
30	I would stop myself from panicking when I fail.					

SECTION C

ACADEMIC ENGAGEMENT

Please indicate by ticking the extent to which you agree with the following statements

1= Never, 2= Rarely, 3= Sometimes, 4= Often, 5= Always

	Statements	1	2	3	4	5
	Behavioural Engagement					
1	I pay attention at the lecture room.					
2	I follow the university's rules.					
3	I usually do my assignment on time.					
4	When I have doubts, I ask questions and participate in debates in the lecture room.					
5	I usually participate actively in group assignments.					
	Emotional Engagement					
6	I feel very accomplished at this university.					
7	I feel excited about the university work.					
8	I like being at the university.					
9	I am interested in the university work.					
10	My lecture room is an interesting place to be.					
	Cognitive Engagement					
11	When I read an educational material, I question myself to make sure I understand the subject I am reading about.					
12	I talk to people outside the university on matters that I learned at the lecture room.					
13	If I do not understand the meaning of a word, I try to solve the problem, for example by consulting a dictionary or asking someone else.					
14	I try to integrate the acquired knowledge in solving new problems.					
15	I try to integrate subjects from different disciplines into my general knowledge.					

SECTION D

ACADEMIC BURNOUT

Please indicate by ticking the extent to which you agree with the following statements

0= Never, 1= A few times, 2= Once a month or less, 3= A few times a month, 4= Once a week, 5= A few times a week, 6= Everyday

	Statements	**0**	**1**	**2**	**3**	**4**	**5**	**6**
	Exhaustion							
1	I feel emotionally drained by my studies.							
2	I feel used up at the end of a day at the university.							
3	I feel tired when I get up in the morning and I have to face another day at the university.							
4	Studying or attending a lecture is really a strain for me.							
5	I feel burned out from my studies.							
	Cynicism							
6	I have become less interested in my studies since my enrolment at the university.							
7	I have become less enthusiastic about my studies.							
8	I have become more cynical about the potential usefulness of my studies.							
9	I doubt the significance of my studies.							
	Academic Efficacy							
10	I cannot effectively solve the problems that arise in my studies.							
11	I believe that I cannot make an effective contribution to the lectures that I attend.							
12	In my opinion, I am not a good student.							
13	I do not feel stimulated when I achieve my study goals.							
14	I have not learned many interesting things during the course of my studies.							
15	During class I do not feel confident that I am effective in getting things done.							