UNIVERSITY OF CAPE COAST

WRITING ANXIETY AND ESSAY WRITING PERFORMANCE AMONG SENIOR HIGH SCHOOL STUDENTS IN GREENVILLE EDUCATION DISTRICT, SINOE COUNTY, LIBERIA

SACKOR, MORRIS A.

2023

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BY

SACKOR, MORRIS A.

Thesis submitted to the Department of Arts Education, Faculty of Humanities and Social Sciences Education, College of Education Studies, University of Cape Coast, in partial fulfilment of the requirements for the award of Master of Philosophy degree in Arts Education (English)

SEPTEMBER 2023

ABSTRACT

The current study was purposed on investigating writing anxiety and essay writing performance among senior high school students in Greenville Education District, Sinoe County, Liberia. It was theoretically hinged on the Affective Filter Hypothesis and the Three-System Response Theory of Anxiety. Adopting a quantitative approach with a cross-sectional survey design, a questionnaire was utilised as the main instrument of collection of data. A sample of 313 students were selected through the proportionate stratified random sampling technique. In addition, 60% of respondents' averages in English were collected as essay writing performance scores. The data were analysed using both descriptive and inferential statistics such as mean, standard deviation, frequency, percentage, independent-sample t-test, repeated measures analysis of variance, multiple regression, and analysis of variance. The results of the study showed that SHS students experience a moderate level of overall writing anxiety and moderate levels of cognitive anxiety, somatic anxiety, and avoidance behaviour. It was also found that students' cognitive anxiety and somatic anxiety were significantly higher than their avoidance behaviour. However, there was no difference in students' cognitive anxiety and somatic anxiety. The study further revealed that cognitive anxiety and avoidance behaviour significantly predicted students' essay writing performance. However, somatic anxiety did not contribute to students' essay writing performance. Moreover, it was found that there was no significant difference in students' writing anxiety based on sex. Furthermore, it was revealed that lowly anxious and moderately anxious groups of students performed significantly higher in essay writing than highly anxious students. It was recommended, among others, that English language teachers should help students to reduce their fear and worry about essay writing by counselling students. Teachers of English language should identify students who show signs of shivering and sweating during essay writing and help them by boosting their self-confidence and, as well, avoid giving negative feedback on students' written products. English language teachers' efforts to minimise students' level of writing anxiety should target both male and female students.

ACKNOWLEDGEMENTS

I extend posthumous thanks and appreciation to Prof Bethel T. Ababio, (PhD) for his tireless efforts in propelling me to nearly complete this study before his irreplaceable loss. His motivation that 'anything worth achieving is worth doing' served as a force that drove me throughout the study. Indeed, I am deeply gratified for his unmatched supervisory role played. I also owe a depth of gratitude to Dr. Isaac Atta Kwenin who guided me as a succeeding supervisor to the late Prof Ababio. As a novice to research, I would not have completed this work without the help of some experts: Dr. Prince Y. Asare and Dr. Edmond K. Agormenda, who, in addition to my supervisor, guided me throughout this study. I am profoundly grateful to them, especially for their contributions to the statistical analysis. Finally, I want to extend my bountiful thanks to the Ministry of Education for providing me with this scholarship opportunity to pursue my MPhil degree in Arts Education/English and to Dr. Cecelia Cassell, Dean, William V.S. Tubman College of Education, University of Liberia, for her farsightedness that saw the IRISE Project extended to the University of Liberia which led to the selection of graduates of the College of Education for this scholarship. To Hon. Matthew G. Zarzar, my current employer, for allowing me to remain employed with him while pursuing my studies in Ghana, I say plenteous thanks; to Miss Aggie Zarzar, Mr. Tougbay Barcelious Zarzar, Mr. Esau Sargbeh, and many others, who could not be mentioned due to limited space, for their financial contribution to my studies, I say bounteous thanks, and to all my family members and friends, I owe a profundity of gratitude to you.

DEDICATION

To my spouse, Miss Jacqueline G. Karmo and my children, Pretty, Gifty, Morris and Richmond

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LIST OF ACRONYMS AND ABBREVIATIONS

AFH	: Affective Filter Hypothesis
ANOVA	: Analysis of Variance
CEO	: County Education Officer
DEO	: District Education Officer
EFL	: English as a Foreign Language
ESL	: English as a Second Language
EWAS	: English Writing Anxiety Scale
FL	: Foreign Language
IRB	: Institution Review Board
LAD	: Language Acquisition Device
LISGIS	: Liberia Institute for Statistics and Geo-Information Services
L1	: First Language
L2	: Second Language
MoE	: Ministry of Education
SHSSEWAS	: Senior High School Students Essay Writing Anxiety Scale
SHS	: Senior High School
SL	: Second Language
SLWAI	: Second Language Writing Anxiety Inventory
TSRTA	: Three-System Response Theory of Anxiety
WAEC	: West African Examinations Council
WASSCE	: West African Senior School Certificate Examinations
WAT	: Writing Apprehension Test

CHAPTER ONE

INTRODUCTION

Educational systems, globally, have emphasised factors that undermine learners' achievements as generally, these systems tend to be rated based on learners' achievement. One such factor is anxiety, described as fear, worry, or other emotional discomforts, as well as maladaptive behaviour associated with academic tasks (Cheng *et al.*, 1999). Specifically, this study focused on language skill-specific anxiety known as writing anxiety, a phenomenon found to negatively affect achievements in writing (Horwitz *et al.*, 1986; Daly, 1977). Writing anxiety has been a topic of considerable research interest since its introduction in the mid-1970s by Daly and Miller.

Since its origin in the United States of America as a research area, studies into writing anxiety have sprouted across the globe in the contexts of both English as a first language (L1) and English as a second or foreign language (L2/ESL/EFL), with findings indicating inconsistency, suggesting inconclusiveness of results. In consideration of these inconsistent results, this current study contributed to the line of investigations in the furtherance of studies on writing anxiety. Hence, the contents of this first chapter comprise the background to the study, the statement of the problem, the purpose and objectives of the study and the significance of the study. Other contents of the chapter include the delimitations of the study, the limitations of the study and the definitions of key terms and phrases and ends with the organisation of the study.

Background to the Study

Considerable research attention has been given to emotional factors, including motivation, self-efficacy and anxiety, among researchers worldwide. Undoubtedly, these emotional factors are crucial to learning, as they tend to promote or inhibit learning (Krashen, 1982). It is, generally, acknowledged that the promotion or inhibition of learning depends on the levels of these emotional factors. On the one hand, a low self-efficacy and motivation may obstruct learning, while a high motivation or self-efficacy may promote learning (Krashen, 1985). On the other hand, a high anxiety may impede learning, whereas a low anxiety may arguably promote learning (Bandura, 1989; Krashen, 1982; Horwitz *et al.*, 1986).

Although all of these factors are important to learning and have been extensively considered in previous research globally, this current study focused on anxiety, specifically an aspect of anxiety known as writing anxiety, which may be experienced when learners participate or anticipate in participating in writing tasks (Daly & Miller, 1975; Hassan, 2001). Like anxiety, which may be described as fear, worry, or distortion of thoughts and maladaptive behaviour that could be experienced or exhibited by learners when engaging or anticipating to engage in learning, resulting in the low acquisition or learning of a language, or inhibition of language learning (Krashen, 1982), studies show that writing anxiety negatively affects writing outcomes as highly anxious writers tend to produce less adept writing (Daly, 1977), for instance.

Studies in writing anxiety were engendered by Daly and Miller (1975) at a university in the United States of America. In their groundbreaking

article, Daly and Miller reported that learners who felt apprehensive about writing may not only produce poor quality writing but could also refrain from making academic career choices in courses that demand a considerable amount of writing. Following that, studies investigating writing anxiety have bourgeoned across the world in contexts where English is treated as a first language (L1), and second language or foreign language (ESL/EFL): Bannister (1992) in the United States of America, Cheng *et al*. (1999) and Cheng (2004, 2002) in Taiwan, Horwitz et al. (1986) in Hungary and Hassan (2001) in Egypt. Other researchers include Hartono and Maharani (2020) in Indonesia, Fakeye and Ohia (2016) in Nigeria, Sabti *et al*. (2019) in Iraq and Apawu and Anani (2017) in Ghana. But what is writing anxiety? A thorough understanding of the construct is needed at this juncture. Hence, writing anxiety is briefly described further.

As research interest in writing anxiety flourished over the years, various definitions and descriptions of the concept emerged. Various scholars and researchers in language operationally define and describe writing anxiety in varying terms, however, without obscuring the meaning of the construct. According to Hassan (2001), writing anxiety may be described as avoiding writing tasks, and of situations that may possibly necessitate writing activities, followed by evaluation of the written product. In a similar viewpoint, Huerta *et al*. (2017) characterised writing anxiety as various levels of emotional uncomfortability or displeasure, such as nervousness and anguish, arising from perceived writing activities. Likewise, according to Abdullah (2019), writing anxiety may be identified as a situation whereby learners typically refrain from participating in writing assignments out of concern about being

judged. As well, Erkan and Saban (2011) have considered writing anxiety as an individual's tendency to avoid writing, particularly when there is a potential to evaluate the written product. Furthermore, Ibarra (2021) recognised writing anxiety as situation-specific anxiety that poses a drawback to students' performance in writing.

While these descriptions differ considerably relative to the diction employed, they invariably point to one thing; that is, writing anxiety poses a barrier to learners' writing progress. Indeed, a writer who feels emotionally uncomfortable, nervous and frightened by perceived evaluation, will possibly avoid undertaking writing activities (Hassan, 2001). Thus, this study considered writing anxiety as fear of, worry about writing, avoidance of writing tasks and bodily arousals experienced when one is engaging or expecting to engage in writing activities.

Research has revealed that anxiety toward writing may be attributable to several factors (Abdullah *et al*., 2018; Ekmekçi, 2018). Abdullah *et al*. and Ekmekçi concluded that writing anxiety could be attributed to an evaluation of writing outcomes, negative expectations of writing outcomes, insufficient writing practice, lack of linguistic ability, receiving undesirable feedback from instructors and writing under time constraints. Additionally, Zhang (2011), Erkan and Saban (2011) and Abdulaal (2021) conjectured that writing anxiety may be triggered by grammar-focused language learning and the complicated nature of the process of writing. Furthermore, a lack of self-confidence was underscored by Cheng *et al*. (1999) as a major cause of anxious feeling toward writing.

Writing anxiety has been identified to manifest in a number of ways. It could be symptomatically manifested physiologically/somatically, cognitively, and behaviorally. Somatically, writing anxiety may manifest through bodily symptoms such as perspiring, shuddering, nauseating, racing heartbeat, aching head and upsetting stomach. Cognitive manifestations of writing anxiety may include fear, self-doubt, embarrassment, frustration, guilt, racing thoughts and difficulty concentrating. Furthermore, observable signs such as tendency to avoid writing activities, and procrastination to engage in writing activities and other forms of maladaptive behaviour toward writing may typify behavioural manifestations of writing anxiety (Sabti *et al*., 2019; Aripin & Rahmat, 2021; Prasetyaningrum *et al*., 2021). The intensity or severity of these symptoms may vary among individuals. Thus, how intensively or severely writing anxiety is experienced is gradable into three levels—high, moderate, and low (Cheng, 2004). This three-level gradability has been the model of examining writing anxiety among learners from its foundation (Daly & Miller, 1975).

Results of studies examining ESL/EFL learners' levels of writing anxiety appear to be mixed. However, it seems to suggest that high writing anxiety is more prevalent among second or foreign language learners of English (Rezaei & Jafari, 2014; Wern & Rahmat, 2021; Rasool *et al*., 2023; Sabti *et al*., 2019). Rezaei and Jafari's study conducted among Iranian foreign language learners of English revealed that the majority of the participants experienced high writing anxiety. Similarly, Wern and Rahmat found high level of writing anxiety to be predominant among Chinese EFL students, reporting that 70% of the subjects reported feeling highly anxious toward

writing when engaged in writing tasks. In addition, Rasool *et al*. established that most of their subjects (n = 37, 48.6%) out of the total of 76, felt highly anxious toward writing compared to 43.4% and 8.3% who, respectively, felt moderately and lowly anxious toward writing. Furthermore, Sabti *et al*.'s. study revealed that, out of 100 participants, about 54% felt highly anxious about writing, while 34% and 12% respectively felt moderately and lowly anxious toward writing.

In contrast to the results of these studies, some studies reported moderate writing anxiety among participants (Aloairdhi, 2019; Masriani *et al*., 2018; Kurniasih *et al*., 2022; Xie & Yuan, 2020). Overall, these findings appear to suggest that high and moderate writing anxiety are prevalent among learners of English as a second language or foreign language, as none of these studies found low writing anxiety to be more prevalent among participants.

Evidence available in the literature show that high writing anxiety may affect the writing outcomes of learners. Several studies show that learners who felt highly anxious toward writing produced writing that is low-quality, thus affecting their writing outcomes (Daly & Miller, 1975; Daly, 1977; Cheng, 2004). Daly and Miller's pioneering research examining writing anxiety among L1 learners at the University of West Virginia, USA, showed that being highly anxious about writing may affect the writing outcomes of students. The researchers concluded that being highly anxious toward writing may not only affect writing quality produced but may also influence the academic career choices of learners, as participants seemed to consider taking careers in fields that demand no intensive writing.

Daly (1977) conducted a similar study in the USA and found differences among highly anxious and lowly anxious individual participants. Daly's study revealed that highly anxious students produced a less adept quality of writing compared to lowly anxious students. Unsurprisingly, these results align well with the views of Al-Shboul and Huwari (2015) and Kirmizi and Kirmizi (2015) who believe that highly anxious students frequently struggle to have their thoughts organised, have their writing goals and objectives specified, produce scanty texts filled with numerous grammatical aberrations, and use expressions that are grammatically, rhetorically, and lexically inappropriate. Additional studies availed evidence that showed that high writing anxiety may negatively affect writing performance (Negari & Rezaabadi, 2012; Shang, 2013). Further, more recent studies revealed that lowly anxious students produced high-quality writing than highly anxious students (Balta, 2018, Sabti *et al*., 2019). For instance, Balta's study showed that students who felt high writing anxiety produced less quality of argumentative essays. Besides comparing quality of writing produced, other studies have examined learners' writing performance differences among highly anxious, moderately anxious, and lowly anxious learners.

Erkan and Saban (2011) found a statistically significant difference in writing performance among lowly, moderately, and highly anxious students. As well, a study carried out by Sabti *et al.* (2019) revealed a significant difference in students' writing outcomes among highly anxious, moderately anxious, and lowly anxious students. These results could lead to a conclusion that highly anxious students may perform poorly in writing than moderately and lowly anxious students.

It appears to be a generic knowledge that writing anxiety only becomes debilitative at a high level but seems to be facilitative at moderate and low levels (Lehrer *et al*., 1990; Brown, 2007). These researchers hold the view that moderate and low levels of writing anxiety tend to serve as a stimulant for learners, arguing that only high writing anxiety has a debilitative effect on writing outcomes of learners. This argument seems to be supported by several studies which show that learners who were highly anxious performed poorly in writing in comparison with learners who were moderately and lowly anxious (Hassan, 2001; Zhang, 2013; Tsiriotakis *et al*., 2017; Huerta *et al*., 2017).

It is important to state that studies into writing anxiety became more revolutionalised at the beginning of the 21st century. This revolutionisation may have stemmed from Cheng's (2004) befitting conceptualisation of writing anxiety from a three-dimensional outlook in consideration of the manifestations of the phenomenon. Before the 21st century, studies conducted on writing anxiety treated the concept as unidimensional (Daly & Miller, 1975; Daly, 1977; Cheng *et al*., 1999). However, in 2004, Cheng aptly conceptualised that examining writing anxiety should take account of its three aspects–somatic anxiety, cognitive anxiety and avoidance behaviour–reflecting physiological/somatic, cognitive and behavioural manifestations of the construct. The three-dimensional perspective proposed by Cheng has become a popularised model for investigating writing anxiety among ESL/EFL researchers (Sabti *et al*., 2019; Aripin & Rahmat, 2021), for instance.

The results of studies examining writing anxiety based on its categories demonstrated mixed results. Some studies report that the cognitive aspect of anxiety was the more prevalent among ESL/EFL learners (Quvanch & Kew, 2022; Zhang, 2011; Rezaei & Jafari, 2014; Wern & Rahmat, 2021; El Shimi, 2017). For instance, a recent study by Quvanch and Kew among Afghan undergraduate students found that 36.4% of the students experienced cognitive anxiety, which suggests that participants fear or worry more about writing tasks. However, some other studies discovered the avoidance behaviour category, characterised by avoidance of writing tasks, and other maladaptive predispositions toward writing to be the more predominant category of writing anxiety among participants (Ho, 2015; Pravita & Kuswandono, 2022). What is more, other studies revealed that the somatic anxiety category was more prevalent than cognitive anxiety and avoidance behaviour among participants (Atay & Kurt, 2006; Arindra & Ardi, 2020), which appears to suggest that participants experienced bodily signs such as shivering, sweating and headache than worry and fear when engaged in writing. However, these apparent mixed results imply inconclusiveness. Researchers have also examined the nexus between writing anxiety and the outcomes of writing among ELS/EFL learners

Evidence pertaining the relationship between writing anxiety and writing outcomes among both ESL and EFL learners appears to be mixed, as some studies presented evidence of a significant negative correlation (Fakeye & Ohia, 2016; Nordin *et al.*, 2019; Erkan & Saban, 2011; Kurniasih, 2017), while other studies (Despita & Pratiwi, 2019) found no significant correlation. For instance, Fakeye and Ohia investigated essay writing anxiety among

senior high school students in Nigeria. The study revealed a significant moderate inverse relationship between writing anxiety and students' achievement, suggesting that a high essay writing anxiety may lower students' achievement in essay writing. Fakeye and Ohia's study's results are slightly different from Erkan and Saban's study which revealed a significant negative weak correlation between writing anxiety and writing achievement. On the contrary, Despita and Pratiwi found no correlation between writing anxiety and writing achievement among respondents. These inconsistent findings suggest that more research is needed to explore the nexus between writing anxiety and writing performance. Hence, more studies are needed. In addition to examining relationship, investigations have been conducted relative to gender differences in the levels of writing anxiety among ESL/EFL learners.

Studies investigating gender differences conveyed conflicting results. On the one hand, some studies found that males were more highly anxious than females (Zhang, 2013; Jebreil *et al*., 2015; Anggraini, 2016; Kabigting *et al*., 2020). On the other hand, females were shown to be comparatively highly anxious toward writing than males (Cheng, 2002; Güneyli, 2016; Al-kubaisy *et al*., 2019; Zareie Khatooni & Ghobadi, 2022). For instance, Zhang carried out a study among EFL learners in Taiwan and found that male students' anxiety level was higher than female students' anxiety level, while Cheng's study carried out in Taiwan revealed that female students showed a high level of writing anxiety than male students. Generally, results of studies investigating writing anxiety prove inconsistent. Thus, more empirical studies such as this current study are needed to continue unravelling the phenomenon in different contexts.

It is the researcher's observation based on his experience of some years of teaching English in the study area, Greenville Education District, Sinoe County, Liberia, informing his considered opinion that writing anxiety could be present among senior high school students. It goes without saying that Liberia is a country where English is not a mother tongue of majority of learners but used as second language (L2), and considering the prevalence of writing anxiety among second/foreign language learners, it might have been that senior high school students of the study area may also experience writing anxiety. However, as personal observations may be considered inadequate to inform any conclusion on the existence of any phenomenon, including writing anxiety (Daly & Miller, 1975), empirical studies of this kind are needed to be conducted in order to validate or establish the presence of writing anxiety among the target population in the study location.

Statement of the Problem

The last three years' reports (2020-2022) of the West African Examinations Council-Liberia (WAEC-Liberia) show that a vast majority of the senior high school students across the country did not perform in the English language examination as expected. In 2020, of the 39,367 students who took the English language examination, only 7.43% obtained credit (A1-C6), and only 2.25% could obtain credit out of the 40,036 students who took the examination in 2021, while in 2022, 4.50% out of 43,413 students were able to obtain credit (Daily Observer, 2022, August 10). Although the English language examination paper consists of two components–objective and essay–the essay component constitutes 60% of the total mark, suggesting that the essay component may account for most of the performance results in English.

While several factors could be responsible for students' poor performance in the English examination, it has been established that one key factor that consistently explains students' performance in the English language subject is writing anxiety (Daly & Miller, 1975; Daly, 1977; Hassan, 2001; Fakeye & Ohia, 2016; Tsiriotakis *et al*., 2017; Balta, 2018; Sabti *et al*., 2019). Thus, explaining these poor results of Liberian senior high school students in English language in the West African Senior School Certificate Examinations (WASSCE) requires determining the level of students' writing anxiety and relating it to their performance in essay writing in the English subject.

Although writing anxiety has been a global research topic for over five decades, studies on the phenomenon in the Liberian context seem to be lacking. Besides, findings on the levels of writing anxiety, differences in levels of writing anxiety between male and female students, and the influence of writing anxiety on writing performance, are mixed in the literature (Zhang, 2013; Cheng, 2002; Rasuan & Wati, 2021; Sabti *et al.*, 2019). In addition, which category of writing anxiety–somatic, cognitive, or avoidance behaviour–is more prevalent among learners has not been fully established as results are conflicting. Moreover, the findings regarding writing performance across levels of writing anxiety are inconclusive. These conflicting findings suggest finding gap which the current study sought to fill.

Further, most of the previous studies predominantly concentrated on university-level ESL/EFL learners; only a few studies concentrated on the secondary level, a population gap this study endeavoured to fill. Furthermore, notwithstanding the extensive research being conducted on writing anxiety

across the globe, no study seems to be carried out in the Liberian context, a geographic gap filled by this study.

Purpose of the Study

Employing quantitative approach and a cross-sectional design with a close-ended Likert scale questionnaire as the primary instrument for data collection, this study was purposed on investigating writing anxiety among senior high school students. Specifically, it aimed at determining the level and prevalence of writing anxiety among students, the differences in writing anxiety level between male and female students, the influence writing anxiety has on students' essay writing performance and differences in essay writing performance across lowly anxious, moderately anxious, and highly anxious groups of senior high school (SHS) students in Greenville Education District, Greenville, Sinoe County, Republic of Liberia,

Objectives of the Study

The following objectives were designed in order to achieve the aim of the study; to

1. determine the level of SHS students' writing anxiety.
2. examine differences in levels of SHS students' cognitive anxiety, somatic anxiety and avoidance behaviour.
3. assess the influence of writing anxiety on essay writing performance of SHS students.
4. determine differences in the writing anxiety between male and female SHS students.
5. examine essay writing performance differences among lowly anxious, moderately anxious, and highly anxious groups of SHS students.

Research Questions and Hypotheses

Predicated on the objectives of the study, three research questions and two research hypotheses were formulated to guide the study.

Research Questions

1. What is the level of SHS students' writing anxiety?
2. Do differences exist among SHS students' cognitive anxiety, somatic anxiety and avoidance behaviour?
3. To what extent does writing anxiety influence SHS students' essay writing performance?

Research Hypotheses

$H_0$1: There is no statistically significant difference in writing anxiety between male and female SHS students.

$H_0$2: There is no statistically significant difference in essay writing performance among groups of lowly anxious, moderately anxious and highly anxious SHS students.

Significance of the Study

Writing anxiety has been a critical phenomenon of research interest over five decades for its debilitative impact on writing outcomes. While it has been given a significant global research attention, no study, up to date as examined writing anxiety in the Liberian context. As a consequence, little to nothing is known about writing anxiety in the context of the study. Therefore, this pioneering study is critical in bridging the existing research and knowledge gaps. Its findings will engender further investigations into the phenomenon in the Liberian context.

Additionally, the findings of the study will be of benefit to stakeholders and policymakers. The evidence provided by the study will inform policymakers and other educational stakeholders to design programmes and strategies aimed at mitigating writing anxiety among students.

Finally, based on the findings of the study, English language teachers will be informed of the negative impact of writing anxiety on students writing outcome. They will take appropriate actions by providing conducive classroom spaces and affordances geared toward reducing pressure on students and ease their fear of writing.

Delimitation of the Study

The study was restricted to only SHS students (both males and females) in Greenville Education District, Sinoe County, enrolled for the academic year 2022/2023. SHS level of education in Liberia comprises three grade levels: namely, 10th, 11th, and 12th grades. The study was delimited to these three classes of students because preparation for the West African Senior School Certificate Examinations (WASSCE) begins from 10th grade through to grade 12th. Thus, rigorous writing activities are implemented in preparing students for the WASSCE. In other words, students in SHS are required to do more essay writing in preparation for the WASSCE. The English language subject is one of the two core subjects required by the West African Examinations Council-Liberia for all students to pass before graduating from high school. While essay writing anxiety may be experienced in other subject areas, this study is delineated to the English subject because teaching and learning of essay writing is restricted to the English subject in the Liberian context.

Hence, no consideration was given to other SHS subjects in terms of essay writing anxiety.

Limitations of the Study

The findings of the study are limited to senior high school students of Greenville Education District, Sinoe County, Liberia. Thus, findings are only generalised to senior high school students of this education district. The impossibility of generalisability of findings to other senior school students outside the study area was one of the weaknesses of the study. Additionally, using 60% to represent respondents' essay writing performance in the English subject is problematic, as such performance results stemmed from teacher-made tests that may not follow the criteria of the a standardised test. Furthermore, scoring of essays is, largely, based on subjectivity on the part of the teachers. Therefore, any credibility issues associated with teachers' grading of essays was another weakness that could not be overcome.

Definitions of Key Terms

The definitions of the following key terms and phrases will apply throughout the study. Where the terms or phrases are used in a specific way other than as defined here, their meanings will be specified.

Writing anxiety: this refers to negative perceptions about writing that may heighten fear, worry, preoccupation about writing outcomes. The phrase also applies to bodily signs such as sweating, headache, shivering, tense muscles that an individual may experience when engaged in writing or expected to engage in writing. Furthermore, this expression refers to the tendency of an individual avoiding, or delaying to engage in, or failing to

complete writing activities. **Writing anxiety** will be interchangeably used with **writing apprehension** throughout this study.

Cognitive anxiety: this is an aspect or a category of writing anxiety that is manifested through worry, fear, and other mental processes that may arise due to perceived writing activities. It may also be referred to as a negative perception toward writing which tends to interfere with stable thoughts when an individual is writing or is expected to participate in writing.

Somatic anxiety: This is a category of writing anxiety that manifests through sweating, quivering, stomachache, and other bodily signs that may manifest as an individual engages or about to engage in writing tasks.

Avoidance behaviour: This is the behavioural aspect of writing anxiety, which is a category of writing anxiety demonstrated through an individual's predisposition to avoid writing activities, procrastinate in participating in writing activities and engage in false rationalisation such as excuses to participate in writing.

Essay writing performance: while essay writing performance may be considered demonstrating essay writing skills under specified time, in this study, essay writing performance is defined as sixty per cent (60%) of participants' scores in the English subject.

Gender: gender, in this study, refers to biological natural sex of human beings. This denotes male and female sexes of participants. Thus, all other categorisations of gender are precluded from this study.

Senior high school students: This refers to any students enrolled in grades 10 to 12 according to the hierarchical structure of the Liberian school system. **Student(s)** and **learner(s)** will be interchangeably used throughout

this study, and refer to anyone learning the English language as first language, second language or foreign language.

Organisation of the Study

The study is organised into five chapters–chapters one to five. Chapter One has already introduced the study by describing key variables and reviewing extant literature. This Chapter has also stated the problem statement, as well as the purpose and objectives of the study, and research questions/hypotheses and significance of the study. Moreover, the delimitation, the limitations, and the operational definitions of terms and phrases have been presented in this Chapter.

Chapter Two contains reviews of pertinent literature, including theoretical review, conceptual review, and empirical review of literature relevant to the study. In Chapter Three, the methodology, including the research philosophy underpinning the study, the research approach and design, the population and sample, the data collection instrument, and the data analysis procedures and tools are presented. Chapter Four comprises results and discussions, centering on presentation and analysis of demographic and main data, while Chapter Five contains a summary of the findings, conclusions based on the findings, recommendations, and suggestions for further studies.

So far, the introduction, the background to the study, the statement of the problem, the purpose and objectives of the study, the significance, the delimitations, the limitations and organisation of the study have been presented in Chapter One. In the next chapter, reviews of theories, concepts, and empirical literature are presented.

CHAPTER TWO

LITERATURE REVIEW

Overview

This chapter presents reviews of literature relevant to the study. The literature review encompasses theoretical review, conceptual review and empirical review. The affective filter hypothesis and the three-system response theory of anxiety are reviewed under theoretical review. A number of concepts are reviewed under conceptual review. These include the concept of anxiety and types of anxiety, the concept of writing anxiety and the categories of writing anxiety. Other concepts include the concept of writing, difficulties in writing and the concept of essay writing. Empirical review encompasses extant studies on the levels of writing anxiety, the categories of writing anxiety and gender differences in the levels of writing anxiety. Existing empirical studies on the relationship between writing anxiety and writing performance, the influence of writing anxiety on writing performance and writing performance across levels of writing anxiety were also reviewed.

Theoretical Review

In this section, relevant theories supporting this study were reviewed. While there are a number of other theories of anxiety, the following two theories, the affective filter hypothesis (Krashen, 1982) and the three-system response theory of anxiety (Lang, 1971) were deemed more pertinent and relevant to the current study.

The Affective Filter Hypothesis

The affective filter hypothesis (henceforth AFH) was advanced by Stephen Krashen, a venerated expert in second language acquisition research,

in 1982. It is a part of Krashen's (1982) *Monitor Model*, a popular second language acquisition theory comprising five hypotheses, namely: the acquisition-learning hypothesis, the monitor hypothesis, the natural order hypothesis, the input hypothesis, and the affective filter hypothesis (Krashen, 1982; Zafar, 2011).

According to the AFH, motivation, self-confidence, and anxiety are affective factors that might affect language learning and performance (Zafar, 2011). The hypothesis suggests that learners who have a high affective filter may struggle to learn, as well as, do effectively in the language because of worry or other unpleasant feelings. The AFH further posits that learners with a low affective filter, on the other hand, may be more open to learning and improve their performance (Krashen, 1982). Krashen describes the *filter* as conceptual representation of heightened emotions that tends to block comprehensible input from reaching the language acquisition device (LAD) for linguistic processing to take place, leading to language learning impairment. In other words, the filter serves a blockade or impediment that stops linguistic input from the learner's environment from reaching the language processing device known as LAD.

Although the hypothesis consists three factors–motivation, self-confidence, and anxiety–the anxiety factor is of pertinence and relevance to the current study. Krashen (1982) advances that an increase in anxiety level could lead to raising the filter, thus blocking input from reaching the LAD, resulting in learning and performance paralysis. In addition, the AFH assumes that what accounts for individual differences in acquisition and learning achievement is attributable to the differences in their levels of anxiety,

maintaining that learners with a low level of anxiety internalise comprehensible linguistic input and learn better than those with high level of anxiety (Krashen, 1982).

Numerous studies have utilised AFH to investigate level of anxiety felt by learners when engaged in not only language learning but also other fields of study. For instance, Onwuegbuzie (1999) conducted a study on statistics anxiety at a university in the USA, using the hypothesis as its theoretical foundation. Comparing the levels of statistics anxiety between African American and Caucasian American graduate students, the study revealed that the statistics anxiety level of African American graduate students was statistically significantly higher than that of the Caucasian American graduate students. The study also showed that Caucasian Americans performed relatively significantly better than African Americans, inferring that the difference in performance may be due to difference in their levels of statistics anxiety.

More extensively, the AFH has formed the theoretical basis for more language research, perhaps than any other fields. This could be due to its nature: Krashen's conceptualisation of his monitor model was in second language acquisition and learning. For example, a study carried by Fakeye and Ohia (2016) among high school in Nigeria on the relationship between writing anxiety and essay writing achievement employed the AFH as its theoretical basis. In addition, in a recent study conducted by Wang (2020) on Chinese students' experiences of anxiety in English language learning, the AFH served as the theoretical foundation of the study. Moreover, a study by Altukruni

(2019) adopted the AFH as one of the theoretical grounding for his research on writing anxiety among Saudi undergraduate students.

Despite its wider acceptance in second language research, the AFH, like all other hypotheses, models, and theories, is without criticisms. Some critics argued that Krashen's conclusion that only adult learners have affective filter but children do not have is unsupported because individual differences in motivation, self-confidence, and anxiety have been found among children (Zafar, 2011). Additionally, relative to acquisition of more linguistic forms but few, Gregg (1984) called to question how some linguistics forms are acquired to the extent that some second language acquirers achieve native-like status but fail to master few linguistic forms. Gregg's question stemmed from an observation of a Chinese lady who could speak native-like English except having problem mastering the third person singular. Gregg questioned whether the filter permitted the Chinese lady to acquire all linguistic forms excluding the third person singular form.

Furthermore, McLaughlin (1987) also raised questions about Krashen's reference to LAD in adult learners when it had long been established that after puberty, the LAD is not fully functional. McLaughlin claimed that Krashen's position to extend the functional period of the LAD beyond puberty is disputedly challenged.

In spite of these criticisms against the AFH, it remains a valid hypothesis among not only language researchers but also researchers in different fields (Onwuegbuzie, 1999). Thus, it is adopted as one of the theories undergirding this study. Presented in *Figure 1* is the diagrammatic

framework of Krashen's (1982) affective filter hypothesis modified from Altukruni (2019).

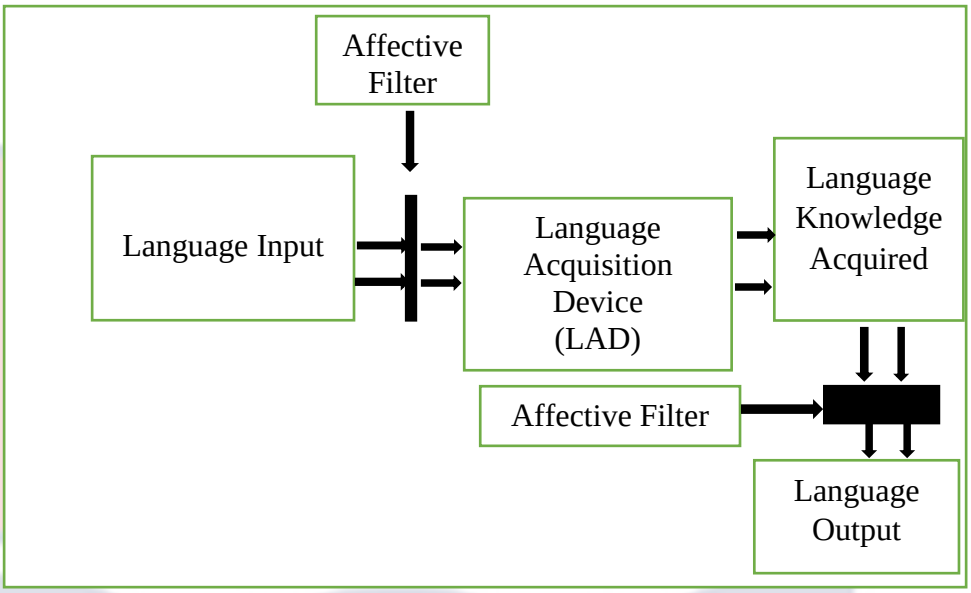

Figure 1: ***The Affective Filter Hypothesis***

Language input refers to language which learners could understand and learn. This is language in the learners' environment including their community and classroom language lesson. The *affective filter* refers to heightening emotions (i.e., anxiety) that may block language input from reaching the LAD. The *language acquisition device* is responsible for processing language input for learning and acquisition to take place, while k*nowledge acquired* denotes learning and acquisition achieved having received linguistic input, and *language output* refers to language production, such as speaking, writing, and comprehension. In the event where the *affective filter* is high, Krashen argues, language input and output become impaired; consequently, for language output, there may be poor outcome in terms of writing, speaking, or comprehension.

The AFH has provided insights into understanding performance differences among learners, and how anxiety negatively influence writing outcomes. Hence, the AFH formed a theoretical base of the study in terms of the influence of anxiety on writing performance. Therefore, it was expected that if learners' writing anxiety is high, it would negatively influence their performance in essay writing, resulting in a large effect size. Contrarily, it is expected that if learners' anxiety level is low, they will perform better in essay writing, also resulting in small effect size. In addition, the hypothesis served as model for explaining the relationship between writing anxiety and writing outcomes of learners. Thus, it is expected that the higher the learners' anxiety level in essay writing, the lower their essay performance will be. On the other hand, if the anxiety level of students is low, it is expected that their performance in essay writing will be high. In the next section, the three-system response theory of anxiety, the second theory underpinning the study, is reviewed.

The Three-System Response Theory of Anxiety

The three-system response theory of anxiety (henceforth TSRTA) was proposed by Peter Lang in 1968, as one of the earliest attempts to combine cognitive (mental reactions) and physiological/somatic (bodily reactions) elements in studying emotions and anxiety. The theory, variably referred to as the tripartite framework or the multidimensional model of anxiety (Cheng, 2004) emerged from Psychologist Peter Lang's observation of anxiety patients. Lang observed that anxiety patients were not only showing signs of fear, worry or distorted thoughts but also manifesting bodily symptoms such

as sweating, shivering, as well as avoidant behaviour such as escaping or moving away from perceived threats and dangers.

According to the TSRTA, anxiety responses may manifest in three interrelated systems, including cognitive system, physiological/somatic system and behavioral system (Serrano Cardona & Muñoz Mata, 2011). The theory suggests that dealing with anxiety in terms of studying or treatment should target all three systems of anxiety responses in an individual. Each of these three systems is briefly described in the following paragraphs.

The first system is the cognitive system, which includes individual thoughts and beliefs, as well as expectations and attitudes toward situations observed as threatening (Serrano Cardona & Muñoz Mata, 2011). This system also comprises how events, situations, and experiences are evaluated by the perceivers. Accordingly, the cognitive system may be characterised by excessive worry, pessimistic thinking, or erroneous beliefs that might create a sensation of threat or danger (Cheng, 2004; Rief *et al*., 2022; Zorowitz *et al*., 2020). In other words, the cognitive response system encompasses mental or thought processes activated when an individual perceives a situation as having the potential of causing harm, pain, embarrassment, shame, or disgrace.

The second system is the physiological or somatic system, which deals with the bodily reactions indicating anxiety, including elevated heartbeat rate, accelerated breathing, perspiration, and rigid muscles (Khan *et al*., 2017; Wen *et al*., 2018). According to Topoğlu (2014: 337), these bodily reactions are believed to be regulated by a part of the nervous system known as the sympathetic system which produces a signal and prepares the body for a "fight or flight" response. In other words, as bodily reactions in the form of

sweating, headache, tense muscles, *etcetera*, increase, the sympathetic nervous system signals to the perceiver to either prepare to withstand or to escape the perceived threatening situation.

The third and last system of the TSRTA is the avoidance behaviour, a behavioural aspect of anxiety that involves the actions or behaviour of a perceiver, characterised by withdrawing, avoiding, or escaping situations perceived as threatening which may help in reducing the sense of danger or threat perceived (Scott-Solomon *et al*., 2021).

While these three systems of anxiety response appear to be distinct, they are interrelated. An activation of one may activate one or the rest. Depending on the activation level of the initiating system, however, the rest may or may not be activated. Put another way, if the cognitive system is first activated, it may or may not cause the rest of the two to become stimulated. This phenomenon is what Rachman and Hodgson (1974) described as *concordance* and *discordance.* A concordance occurs if two or all the response systems are activated simultaneously, while a discordance happens if one system is activated while one or all the remaining two are not stimulated. In other words, concordance takes place when the perceivers worry or fear toward a situation considered threatening and they tend to also tremble, feel tension, or sweat (somatic) and at the same time escape and avoid the situation reviewed as a danger (behavioural). On the other hand, if perceivers viewing a threatening situation do not worry, nor tremble, but avoid the situation, then discordance occurs (Rachman & Hodgson, 1974).

Although the TSRTA has provided significant insights into the intricacies of anxiety by comprehensively considering the cognitive, physiological and behavioural aspects of anxiety, it is without criticisms. Hugdahl (1981) argued that Lang took a reductionist approach by reducing anxiety to three simple response systems–cognitive, physiological and behavioural. Hugdahl maintained that anxiety is a multifaceted phenomenon that encompasses cognitive, physiological, behavioural, emotional and environmental influences. Additionally, Cone (1998) criticised the triple-system response model, terming it as overly simplistic, thereby neglecting other anxiety arousing factors such as social and environmental factors. Cone advanced the idea of a hierarchical model of anxiety that assesses anxiety from a multifaceted perspective, placing the cognitive aspect at the apex of the model.

In spite of these criticisms, this theory has been employed in several psychological research in determining the levels and relationship between components of anxiety responses, and how an activation in one may lead to a corresponding activation of another or vice versa. For instance, a study conducted by Öst *et al*. (1998) indicated that an increase in the behavioural response system was significantly inversely related to a decrease in the cognitive aspect of anxiety response. A similar study carried out by Côté and Bouchard (2005) revealed no significant correlation between behavioural and physiological systems of anxiety response among adults who had experienced phobia toward spiders. These studies seem to suggest that the behavioural and cognitive systems and the behavioural and physiological systems of anxiety response were discordant with each other.

However, Öst *et al.*'s (1998) study did not account for the physiological component of the anxiety theory and Côté and Bouchard's (2005) study also failed to take account of the cognitive aspect of anxiety response. Other studies have, however, taken account of all three components of the TSRTA. A study by Schwartz *et al.* (1997), for instance, authenticated a positive interaction among all three systems among female patients who experienced spider phobia. That is, an increase in the level of one of the response systems led to a corresponding increase in levels of the others.

Furthermore, a more recent study by Fernández-Sogorb *et al.* (2022) employed the TSRTA to examine the profile of school anxiety among Spanish students taking into consideration a number of anxiety symptoms related to cognition, physiology and behaviour. The study indicated a statistically significant difference among the three anxiety responses reported by participants. The need to improve students' well-being aimed at reducing anxiety among them was recommended.

Although there seems to be no evidence of adopting the TSRTA in investigating writing anxiety, the multi-dimensional scale of writing anxiety labeled *Second Language Writing Anxiety Inventory* (henceforth SLWAI) developed by Cheng (2004) was based on the TSRTA. This scale comprises three subscales encompassing cognitive, somatic/physiological, and the avoidance behaviour, and has been widely adopted and/or adapted by several researchers investigating writing anxiety (Sabti *et al.*, 2019; Rasuan & Wati, 2021; Wern & Rahmat, 2021). Referencing the TSRTA as the theoretical foundation for the development of SLWAI, Cheng asserts:

This study adopted a multidimensional approach, specifically Lang's (1971) tripartite framework, in conceptualising anxiety. In the tripartite model, anxiety is understood as consisting of three different and relatively independent components: cognitive, physiological, and behavioral... Based on the tripartite view of anxiety, L2 writing anxiety in this study is defined as a relatively stable anxiety disposition associated with L2 writing, which involves a variety of dysfunctional thoughts, increased physiological arousal, and maladaptive behaviours (pp. 318-319).

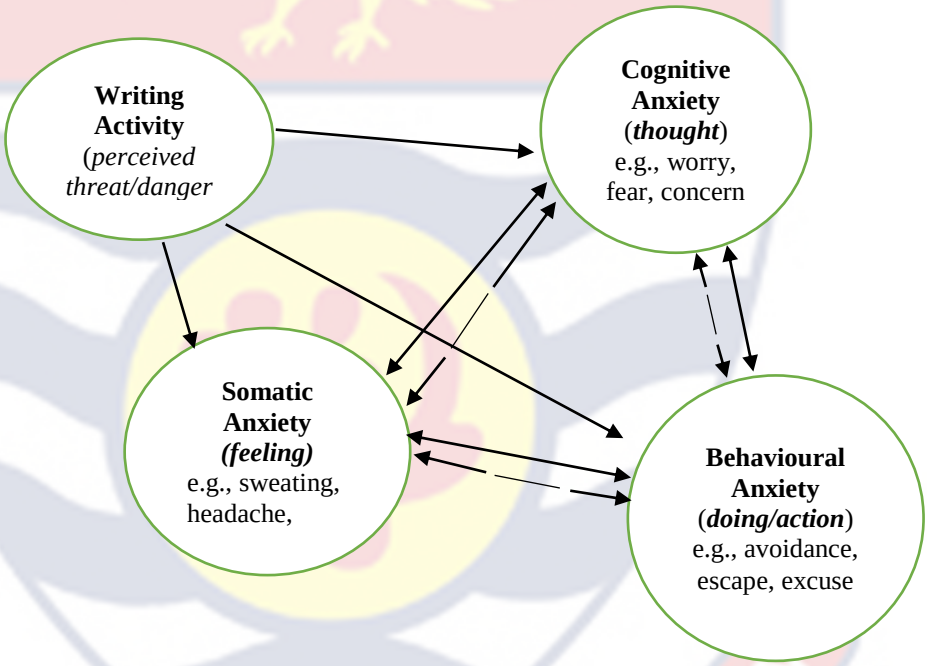

Figure 2: ***The Three-System Response Theory of Anxiety***

The TSRTA is related to this study because it details the three dimensions–cognitive, somatic, and avoidance behaviour–by which writing anxiety may be observable. In the diagramme presented in Figure 2, *writing activity* is considered the threat perceived by learners who anticipate to write or engage in writing. Generally, learners' perception of writing activity may ignite fear, worry, negative thoughts, etc. (cognitive anxiety), shivering, sweating, upset stomach, etc. (somatic anxiety), and avoidance, excuses,

delay, etc. (avoidance behaviour). Additionally, the TSRTA provides a model for understanding why one category of writing anxiety may be predominant than the other (*discordance)* or why there may be no significant difference among three aspects of anxiety in term of their manifestations (*concordance*) as indicated by the *broken lines* and *solid lines* respectively, connecting the three categories of writing anxiety. Having explicated the theories underpinning the study, what follows is the review of concepts pertinent to the study.

Conceptual Review

This section presents a review of some concepts relevant to the study. The concepts reviewed include the concept of anxiety, types of anxiety, the concept of writing anxiety, categories of writing anxiety, the concept of writing, writing difficulties, and the concept of essay writing.

The Concept of Anxiety

Anxiety may be referred to as a feeling of fear, tension, apprehension, nervousness, and worry associated with an arousal of the automatic nervous system (Horwitz *et al.*, 1986). Additionally, anxiety may be identified as a misconception that could lead to autonomic bodily responses, mental disturbances, and social influences perceived as intimidating to one's self (Bandura, 1978). Moreover, Kennedy *et al*. (2020) perceive anxiety as a state of uneasiness that results in interfering with the performance of individuals at all levels of education.

Generally, anxiety is recognised as a debilitative factor causing interference with learners' performance. This debilitative impact of anxiety on learning achievement has been identified by Horwitz *et al*. (1986), who aptly

reasoned that anxiety is a phenomenon that may prevent individuals from succeeding across disciplines, including science, mathematics, or language, thereby impeding them from reaching their set learning goals. In addition, Alamer and Almulhim (2021) observe that anxiety in language learning poses challenges for learners because it is believed to negatively influence learners from engaging in the learning process. Moreover, viewed as one of the determinants of individual differences in learning achievements (Krashen, 1982), anxiety has been recognised as having a negative influence on the performance of students in Mathematics, Science, and English Language (Dortuo, 2020).

In like manner, DeDeyn (2011) clarifies that learners develop anxiety toward language learning if they have previous experiences of failure to use the target language either in an oral or written form. DeDeyn further suggests that in the event of attempting to use a language in a proper manner, learners of a second language may develop anxiety as a consequence of the pressure exerted on them. This pressure may be a consequence of learners of a second language lacking the required linguistic knowledge for full expressions (Horwitz *et al*., 1986). Alike Horwitz *et al.*, DeDeyn attributes the pressure experienced in writing to lack of proper knowledge in language use coupled with past experiences of failure in using the language accurately. Horwitz *et al*. add that a repeated failure using a language to communicate in meeting some expectations may cause learners of a second language to have their self-perception deteriorated and thus develop anxiety toward the use of the language, both in its oral and written forms.

Although anxiety is viewed differently by these researchers, there seems to be a consensual agreement: that anxiety has a negative effect on performance. It is also clear that anxiety arises out of previous experiences in attempting to use a second language, and the lack of adequate linguistic knowledge, although anxiety experiences are not limited to language but learning as a whole across academic disciplines, as indicated by Dortuo (2020). Hence, this review has deepened our understanding of the concept of anxiety, as it relates to performance. Thus, it is reasonable to conclude that a high level of anxiety expereienced by learners will adveresly affect their performance, although it is not clear whether the effect size will be the same across disciplines. However, of concern here is essay writing, as comparison of effect size across learning discipline is outside the scope of this study. Anxiety has been classified into three types, expounded in the subsequent subsection.

Types of Anxiety

Psychologists have classified anxiety into three types according to duration of stimulation and situation of arousal: trait anxiety, state anxiety, and situation-specific anxiety (Horwitz, 2015; Horwitz *et al.* 1986). Trait anxiety relates to a personality trait that is stable, considered as an individual normal disposition towards issues that are not caused by any arousal. In other words, trait anxiety refers to the type of anxiety that forms part of individuals' stable reactions to situations perceived by them to be threatening. Additionally, trait anxiety has been recognised as making up part of an individuals' personality that tends to differentiate them from others in terms of reacting to a perceived threat (Lockefeer & De Vries, 2013). Similarly,

Horwitz *et al*. identified trait anxiety as consistent individual characteristics linked to a disposition to react to varied situations with apprehensions, problems, and concerns.

For state anxiety, it is regarded to be one of a person's character defining qualities and is connected to a variety of psychopathological disorders as well as ongoing high arousal (Saviola *et al.*, 2020). Put another way, state anxiety may be described as a response to a stimulus that provokes anxiety of which an individual may have prior experience. According to Saviola *et al*., state anxiety is characterised as a brief response to unfavourable incidents or circumstances that are viewed as dangerous by individuals arising from previous experiences.

Accordingly, state anxiety may be deemed as relating to emotional feelings individuals generally have towards situations similar to that which caused fear, injury, embarrassment, or shame in the past; for example, a consistent failure to use a language in its written and oral forms (DeDeyn, 2011) constitutes state anxiety.

The third type of anxiety is situation-specific anxiety. The situation-specific anxiety may be designated as an anxiety triggered by specific situations like learning a second or foreign language. Hence, it is referred to as language skill-specific anxiety, like reading anxiety, listening anxiety, public speaking anxiety, writing anxiety, or evaluation anxiety (Cheng *et al*., 1999; Horwitz *et al.*, 1986). According to Marzana *et al*. (2022), anxiety relating to specific situations is a special type of anxiety that develops over time persistently. Although it is persistent over time, it is considered to be intimately tied to certain circumstances where one condition differs from

another. This suggests that situational anxiety may include anxiety related to mathematics and language as well as other areas of learning.

According to language researchers, learning a second or foreign language is more closely related to situation-specific anxiety than trait anxiety because the former is a stable trait that may be sparked by any situation, whereas the latter is only ignited by particular circumstances (Horwitz *et al*., 1986; Naser Oteir & Nijr Al-Otaibi, 2019; Oxford & Ehrman, 1992). Hence, situation-specific anxiety in foreign or second language learning has been categorised into language skill-specific anxiety such as listening anxiety, reading anxiety, speaking anxiety, and writing anxiety (Cheng, 2004; Cheng *et al*., 1999; Horwitz *et al*., 1986).

Although it appears that these types of anxiety are mutually exclusive, that is, an individual experiencing trait anxiety may not experience state and situation-specific anxieties, *vice versa*, there seems to be an interlink between state and situation-specific anxieties. Similarly, state anxiety that arises out of previous experiences, the situation-specific anxiety arises out of specific situation of which an individual may have prior knowledge. As DeDeyn (2011) explained, an individual who consistently fails to use a language in its oral and written forms may develop anxiety. This indicates that consistent failure (previous experience: trait state anxiety) and situation demanding language use (situation-specific anxiety) are related.

However, it is not clear whether there is a link between trait anxiety and state anxiety or between situation-specific anxiety and trait anxiety. Additionally, it remains unclear whether an individual's trait anxiety is differentiated from anxiety arising from previous experiences (state anxiety),

or anxiety arousal due to specific situation (situation specific anxiety) (Horwitz *et al*., 1986). Hence, based on Cheng *et al.* (1999), Horwitz *et al*. (1986) and Cheng (2004) description of situation-specific as relating to anxiety associated with language-specific skills such as listening, speaking, reading, and writing and DeDeyn (2011) exemplification of state anxiety arising from past experiences, it is possible to conclude that state and situation-specific anxieties are related, and are thus relevant to the current study.

Although trait anxiety is important, it is unclear whether an individual's stable reaction towards situations perceived as dangerous may relate to their performance. Hence, its link with the current study is confounding. However, our understanding is expanded by the fact that anxiety varies according to stimulations in relation to traits, state, and situation. As an aspect of anxiety arising from language skill-specific situation, the concept of writing anxiety is reviewed in the next subsection.

The Concept of Writing Anxiety

Writing anxiety or apprehension is a term coined by Daly and Miller (1975) to describe unpleasant emotions toward writing and predisposition of evading the task of writing. Daly and Miller's desire to investigate writing anxiety may have stemmed from the prevailing notion held that learners who were unable to express themselves due to speaking anxiety considered writing as a safe medium of expression. However, their investigation proved that anxiety was not only related to speaking but also to writing, as apprehensive learners tended to avoid writing, and when compelled to write, showed high level of fear, shivering and heightened heart beat rate. Since Daly and Miller's

publication, the concept of writing anxiety has received considerable research attention. Hence, researchers have started to employ varying terms in describing writing anxiety (Cheng, 2004; Cheng *et al*., 1999; Hassan, 2001), for instance.

According to Sabti *et al*. (2019), writing anxiety is regarded as a language barrier that prevents writers from constructively and proficiently expressing their thoughts when writing in a second or foreign language. Sabti *et al.* study indicated an inverse relationship between writing anxiety and other relevant factors of learning like motivation, suggesting that an increase in the level of anxiety during writing decreases the level of motivation. Moreover, Sabti *et al.* maintain that writing anxiety is an issue that should be concerning among both learners of English as a second language (ESL) or foreign language (EFL), as it tends to result in lowering the motivation of ESL/EFL learners. Realising that English is not their first language, Sabti *et al*. observed that the majority of both ESL and EFL learners may tend to experience a high level of writing anxiety when communicating messages in written form.

The prevalence of writing anxiety across all spheres of education has been acknowledged by Mandi and Benamer (2019) who affirm that learners in every educational setting experience some level of writing anxiety. Mandi and Benamer maintain that Algerian EFL learners suffer a considerable level of writing anxiety which negatively affects their writing in English. Moreover, Kusumaningputri *et al*. (2018) have also identified writing anxiety as an extreme fear of the writing process relative to the potential inability to effectively write due to perceived negative evaluation of the written product.

Kusumaningputri *et al.* view was previous posited by Hassan (2001) who identified writing anxiety as a phenomenon related to a specific situation, and is characterised by a general avoidance of writing and of situations that learners believe may require some writing accompanied by the possibility of evaluating their writing outcomes. This aligns well with *Sabti et al.*'s (2019) view by describing writing anxiety as a common phenomenon among students, particularly second language or foreign language (SL/FL) learners, which typically has an impact on their performance.

The challenges EFL/ESL learners face when writing in English had been recognised about three decades ago by Silva (1993) who identified writing in a second language to have distinct overall goals from writing in a first language in terms of interest, persuasion, and linguistic differences or dissimilarities. Such goals of writing in a second or foreign language may be obvious: to attain educational achievements through written examinations by demonstrating via writing knowledge acquired on a particular subject. Kusumaningputri *et al.* (2018) relate these challenges to the variability between EFL/ESL learners' first language (L1) and their second language (L2) in terms of the techniques of writing and linguistic repertoire, noting that such different linguistic repertoires may pose difficulty for the learners of a second or foreign language which might lead to anxiety in writing.

Although these researchers did not spell out to what extent writing anxiety affects writing outcomes in a negative way, it is made obvious that they all agree that writing anxiety adversely affects writing outcomes, especially of ESL/EFL learners. It has been established that the lack of linguistic ability on the part of ESL/EFL results in experiencing anxiety in

writing. Moreover, communicating in languages which are not learners' mother tongues may present hurdles to learners. Hence, significant research attention should be given to writing anxiety. Although initially considered a unidimensional construct, contemporarily, researchers have viewed the concept from three dimensions, which are elucidated in the subsequent subsection.

The Categories of Writing Anxiety

Early research in writing anxiety considered the concept as unidimensional (Cheng, 2002; Cheng et al., 1999; Daly, 1977; Daly & Miller, 1975). However, Cheng (2004), based on the three system response theory of anxiety, conceptualised writing anxiety into three categories, changing the views of treating the concept as unidimensional to viewing it as a multi-dimensional construct. These categories include cognitive anxiety, somatic/physiological anxiety, and avoidance behaviour.

Cognitive anxiety in writing refers to learners' fear, worry, and negative thoughts about writing tasks. In other words, cognitive anxiety may be defined as the mental aspect of anxiety in learners, such as adverse expectations, performance obsession, and worry about how others would perceive their written products (Cheng, 2004; Kusumaningputri *et al*., 2018; Sabti *et al.*, 2019). Accordingly, this category of writing anxiety may be manifested through fear, worry, negative thoughts, being overly concerned about evaluation, for example.

The second category of writing anxiety is somatic anxiety, which may be characterised as an uncontrollable increase in the stimulation of the autonomic system, manifested through a number of bodily signs, including

shivering, sweating, tense muscles and body aches (Cheng, 2004; Erkan & Saban, 2011). The last category, avoidance behaviour, could be identified as the tendency of learners to avoid engaging in writing activities, and situations that demand writing. As Kusumaningputri *et al*. (2018) point out, learners who engage in avoidance behaviour would find excuses, engage in rationalisation, withdrawal attitudes, and other pretexts to avoid writing activities such as writing assignments or essay examinations.

It is possible to argue that although there are three categories of writing anxiety, these categories are not mutually exclusive. Learners experiencing fear, worry, negative thought processes, and preoccupied with writing outcomes, may also sweat and shiver, if engaging in writing is a necessity to achieve a learning goal, like getting a promotion. For example, an essay writing test is required for learners to pass the English subject. Moreover, learners' excessive worry or fear of writing and the uncontrollable arousal of the autonomic system (Cheng, 2004) could be interpreted as causing them to exhibit avoidance behaviour, such as excuses and false rationalisation of why they could not turn out on essay tests or complete and turn in their writing assignments. Probably experiencing writing anxiety begins with the cognitive aspect, the mental processes such as perceptions about the writing process. These thought processes could ignite arousal of the autonomic system, which may result in avoidance of writing. In fact, these conjectures are in relation with the TSRTA, which proposes that cognitive, somatic/physiological and avoidance behaviour responses are interlinking sub-systems of anxiety reactions by which anxiety should be assessed.

The conceptualisation of writing anxiety into cognitive, somatic, and avoidance behaviour, following the TSRTA presents a comprehensive understanding of the concept. However, it remains unclear whether or not these anxiety responses are always present in an individual at the same time. Although there are pieces of evidence adduced in the literature regarding which aspect of writing anxiety is predominant are inconclusive, generally, investigations into writing anxiety follow the tripartite model of anxiety. Consequently, it may be stated that having a comprehensive understanding writing anxiety may require comprehensively assessing the three ways it manifests. But what is writing, and why should it arouse anxiety? The following subsections consider these questions.

The Concept of Writing

Writing is a fundamental component of learning a language which involves formulating and transforming ideas into linguistic structures and stroking them on a page (Suastra & Menggo, 2020). Unarguably, writing is an essential skill for learners to acquire in order to excel in any academic discipline. The importance of writing in not only language learning but also in all academic disciplines has been well acknowledged in the literature (Aliyu, 2020; Khazrouni, 2019; Menggo *et al*., 2019; Suastra & Menggo, 2020). Aliyu opines that skill in writing has a fundamental role in learning English as a foreign or second language, averring that writing skill is required to support learners' achievements academically. In the same vein, Suastra and Menggo consider writing skill as a relevant requirement needed by ESL/EFL learners to enable them to demonstrate their competency in the target language by generating ideas and supporting them using their linguistic repertoire,

employing grammatically correct structures, using appropriate diction, punctuation, and exploiting coherence/cohesion, as well as references in their texts.

Moreover, Khazrouni (2019) describes skill in writing as a means of thinking that subsumes subskills such as skills in grammar, vocabulary, and punctuation. Khazrouni maintains that being skilled in writing plays a vital role in achieving several other nonlinguistic skills such as analytical skills, argumentative skills, and skills in critical thinking, as well as other language skills–speaking, listening, and reading (Nodoushan, 2014). Furthermore, Menggo *et al*. (2019) point out that writing skills empower learners to gain an in-depth understanding of linguistic structures such as morphosyntactic and grammatical structures, as well as semantics–understanding the meaning of these structures. These views align well with the Swain's (2005) output hypothesis which emphasises the importance of learners producing language in order to better learn it. The Swain's output hypothesis underscores the necessity for learners to be afforded the opportunities to use the language they are learning in order to develop their linguistic abilities. These opportunities are indeed provided by affordances in writing, speaking, and comprehension activities–three basic linguistic skills inherent in language learning.

It is generally agreed that writing skills are essential to achieving academic success. Not only that, writing skills also bolster learners to develop other skills that may enhance learning. Indeed, attaining success in academia requires possessing substantially good writing skills. However, difficulties in writing, especially among ESL/EFL learners, are ubiquitous. Predominant in

the literature are three factors causing difficulties in writing, which are considered next.

Difficulties in Writing

Despite the relevance of writing in all academic milieus, it goes without saying that writing poses daunting challenges for learners of a second or foreign language. Such difficulties may be attributed to a number of factors, and one of such factors is cognitive factor like deficiency in working memory resources. For instance, poor linguistic repertoire of L2 learners whose linguistic cognitive resources have been identified as unautomated compared to L1 learners of English (Zabihi, 2018). Zabihi points out that, as a consequence of low working memory resources, retrieval of appropriate linguistic forms during writing tasks in a second language presents hurdles to L2 writers, as they require conscious efforts and attention to account for retrieval of correct linguistic forms from memory and, at the same time, struggle with organisation, grammar, spelling, punctuation, and the like.

Besides the lack of adequate working memory resources, writing anxiety has been recognised as one of the factors presenting difficulties for L2 learners as a consequence of lack of familiarity with the second language (Lee, 2005; Zabihi, 2018). Studies have indicated that learners with high level of writing anxiety produce poor quality writing compared to learners with low writing anxiety (Hassan, 2001), for instance.

In addition to low working memory resources and writing anxiety, writing self-efficacy belief has been identified as a factor causing hindrances in L2 writing. Writing self-efficacy belief may be described as learners' belief about their ability to perform a writing activity (Zabihi, 2018). As Pajares and

Johnson (1994) rightly argued, while anxiety about writing is an important factor warrant investigations, more research attention should be paid to learners' self-efficacy about writing which may influence the extent of learners' anxiety when participating in writing activities. Indeed, it is generally known that both L1 and L2 learners of English face several difficulties in writing composition (He, 2020; Zabihi, 2018).

Although these factors of writing difficulties appear to be distinct, the link among them seems obvious. The lack of adequate linguistic knowledge (low memory resources) may lead to anxiety as the learner writer has to structure to retrieve appropriate linguistic structures from memory while simultaneously accounting for grammar, mechanics, as well as dealing with issues of organisation and cohesion. Additionally, the lack of self-efficacy in writing may weigh down a learner writer, thus causing pressure. Hence, it is possible to reasonably conclude that low memory capacity, anxiety, and lack of self-efficacy are variables interlinkingly presenting writing difficulties. However, it is not clear whether one of these variables can be controlled while examining the others. As a matter of fact, this study only considers anxiety; yet understanding all three factors is worthwhile. Undoubtedly across all facets of education, the most common genre of writing learners encounter is essay writing (Eunson, 2014), which is the focus of the subsequent subsection.

The Concept of Essay Writing

An essay is, arguably, the most significant tool of assessing learning, be it at the high school level, at the undergraduate level, at the graduate level or at the postgraduate level. Several colleges and universities globally accept new entrants on the basis of the quality of their admission essays (Arthurs &

Alvero, 2020). Writing term papers forms a substantial part of college examinations. Moreover, manuscripts like projects, theses, and dissertations are some forms of extended essays written at undergraduate, graduate and postgraduate levels of education.

Described as a piece of prose consisting series of paragraphs written to demonstrate learners' understanding of a particular topic/subject, an essay is a mix of both opinions of the writer and referenced facts on a given topic (Eunson, 2014). Eunson points out that while the writers of essays may be unrestricted to subjectively express their opinions on a given topic in demonstrating their knowledge, presenting a mass of opinions without supporting evidence is meaningless. However, this may be only imperative for nonfictional essays, namely academic essays, as some essays like fictional or literary essays require no evidence (Russ, 1995).

Essay writing is taught and assessed alongside other linguistic skills such as grammar, vocabulary, reading comprehension, listening skills, and speaking skills in high schools. For instance, the language curriculum of Liberia (Ministry of Education, 2011) allocates substantial contents to teaching of essay writing. Various genres of essays–narrative, expository, argumentative, cause-effect essays, are taught at senior high school level, preparing students for the WASSCE.

As mostly a subjective piece of writing, an essay is normally scored subjectively during its evaluation. Consequently, a number of rubrics have been proposed in assessing essay writing, focusing on content, organisation, vocabulary, language use, and mechanics (Winke & Lim, 2015). Although subjectivity remains a major drawback to grading essays, the outcome of the

rubric evaluation becomes the final score of a piece of essay (Winke & Lim, 2015). While researchers have been proposing ways of reducing subjectivity in essay scoring, such as self-rating, peer rating, and teacher rating assessments (e.g., Kusumarasdyati, 2020), the impacts of their proposals are unknown. Accordingly, teachers remain the sole raters of essay writing, especially in high schools.

Undeniably, essay writing forms a significant part of learning a language. The essence of essay writing has been expounded. It is clearly revealed in the literature that essay writing cuts across all levels of education– high school, undergraduate, and graduate levels. It is obviously demonstrated that essay writing is not limited to language learning but also other fields of learning involving intensive writing activities.

In the preceding sections and subsections, relevant concepts have been expounded to deepen understanding of their relevance to the study. In the next section, previous studies conducted on writing anxiety are reviewed.

Empirical Review

This section reviews empirical literature on previous studies conducted on writing anxiety among learners of the English language. Specifically, previous studies on the levels of writing anxiety, categories of writing anxiety, gender differences in levels of writing anxiety, and the relationship between writing anxiety writing performance were reviewed. The review also covers the influence of writing anxiety on writing performance, and differences in essay writing performance across levels of writing anxiety.

Levels of Writing Anxiety

Several past studies have examined the levels of writing anxiety experienced by learners and reported discrepancy in results. On the one hand, some studies have found a high level of writing anxiety to be more predominantly present than moderate and low levels of writing anxiety among students (Altukruni, 2019; Kurniasih *et al*., 2022; Nugroho & Ena, 2021). On the other hand, other studies (Masriani *et al*., 2018; Quvanch & Kew, 2022; Rehelmi, 2020) have revealed a moderate level of writing anxiety to be more pervasive than high and low levels of writing anxiety. Clearly, there seems to be no study reporting a low level of anxiety prevailing among learners, implying that learners, on the whole, experienced moderate to high levels of writing anxiety.

A quantitative study conducted by Altukruni (2019) focused on the levels of writing anxiety experienced by female undergraduates enrolled at a university in Saudi Arabia. With a sample of 296, a Likert-type scale questionnaire labeled *English Writing Anxiety Survey* (EWAS) was administered online to gather data for the study. The data were analysed using descriptive statistics. The results indicated that the majority of the participants (n = 173, 60.48%; M = 81.60) experienced a high level of writing anxiety, compared to moderate level (n = 94; 32.9%; M = 57), and low level (n = 19; 6.64%; M = 43.67). Similarly, Nugroho and Ena (2021) undertook a study that concentrated on levels of writing anxiety among high school students in Indonesia. The population of the study was 182 students from which a sample of 67 was purposefully selected as participants of the study. *Second Language Writing Anxiety Inventory* (SLWAI) was used as instrument for data

collection. The data collected were analysed using descriptive statistics. The results demonstrated that the majority of the respondents (n =40; 59.7%) suffered a high level of writing anxiety, in comparison to moderate level (n = 19; 28.36%) and low level (n = 8; 11.94%). Furthermore, a descriptive quantitative study was carried out by Kurniasih *et al*. (2022) with the aim to determine the levels of writing anxiety among undergraduate students across five universities in Indonesia. The SLWAI questionnaire was administered to 151 students to collect data for the study. Descriptive statistical analysis performed revealed that the majority of the respondents (n = 115; 76.2%) felt a high level of anxiety compared to moderate and low levels (n = 31; 20.5%) and (n = 5; 3.3%) respectively. While these studies seem to suggest that high level of writing anxiety was more prevalent among participants, other studies found contrary results.

A study by Quvanch and Kew (2022) endeavoured to assess the levels of writing anxiety among undergraduate students at a university in Afghanistan. A quantitative approach involving survey design was employed. The data for the study were gathered through the SLWAI questionnaire which was administered to 133 participants. Using descriptive statistics for data analysis, the results of the study indicated that the moderate level of writing anxiety was predominant among respondents (n = 63; 47.37%) contrasted with high level (n = 55; 41.35%) and low level (n = 15; 11.28%). Similarly, Masriani *et al.* (2018) examined the levels of writing anxiety among third-year Indonesian students. Using a quantitative approach, and SLWAI as data collection instrument, the data for the study were gathered from a stratified randomly selected sample of 41 students who took part in the study. Applying

descriptive statistics in analysing the data collected, the results of the study revealed that the moderate level of writing anxiety was prevalent among participants, accounting for 71% (n = 29). In comparison, only 9 students (22%) and 3 (7%) experienced high and low levels of writing anxiety, respectively. A similar study conducted by Rehelmi (2020) adopted the quantitative approach and utilised SLWAI for data collection. The results of the study revealed that 53 (52%) out of the total of 102 respondents drawn from a population of 472 at a university in Indonesia experienced moderate level of writing anxiety.

Although these preceding findings indicate inconsistency, it is clearly shown that high to moderate levels of writing anxiety were predominant. While these studies have made significant contributions in unraveling the levels of writing anxiety among learners, none of them was conducted in the Liberian setting. Therefore, a context-specific study such as this is necessary.

Additionally, although the studies present promising results on the levels of writing anxiety among subjects, the majority of the studies targeted population at university level (Altukruni, 2019; Kurniasih *et al.*, 2022; Masriani *et al.*, 2018; Quvanch & Kew, 2022; Rehelmi, 2020), whereas only one study was conducted at high school level (Nugroho & Ena, 2021). Besides, there are some methodological issues that may render the studies inadequate. Altukruni used a sample size of 296 without specifying the population from which the sample was drawn. Thus, whether the sample was representative of the population is unclear. Additionally, the instrument (EWAS) used to collect data has been called to question because the items

contained in the focused on only the cognitive aspect of writing anxiety, a unidimensional approach to the construct (Cheng, 2004).

Similarly, Nugroho and Ena's (2021) study, although conducted among high school students, the sample of 67 students purposely selected from 182 students lacks representativeness. Precisely, purposeful sampling techniques limit generalization of findings. Using a most popular method of sample size determination would yield a sample size far greater than that of Nugroho and Ena's. For instance, Krejcie and Morgan's sample table will yield a sample of 127 while the Slovin's Formula will yield 125 from a population of 182. In addition, the scope (study area/coverage) of Nugroho and Ena's study was not specified. Alike Nugroho and Ena, Kurniasih *et al.* (2022), Quvanch and Kew (2022), and Masriani *et al.* (2018) also failed to specify the population from which the 151, 133, and 41 respondents, respectively, were drawn. Whereas Masriani *et al*. questionably adopted stratified random sampling to select respondents, Kurniasih *et al.,* and Quvanch and Kew did not specify the sampling techniques yielding their sample sizes. Similarly, lack of representativeness and scopal limitation characterise the study of Rehelmi (2020). Probabilistically, a population of 472 will yield a sample size of 216 using the Slovin's formula and 214 using the Krejcie and Morgan's table. Unfortunately, Rehelmi used 102 respondents, calling to question the representativeness of the population. Besides, the study was limited to a single university, suggesting a narrow scope.

On the basis of the foregoing, it is reasonable to conclude that although the studies made significant contribution in unraveling the levels of writing anxiety, they, on the whole, lack methodological rigour, suggesting the need

for more methodologically sound studies, like the present one which considers writing anxiety from a multidimensional perspective and ensures representativeness of sample, using probability sampling procedures, and wider in scope, covering an entire education district.

The Categories of Writing Anxiety

Previous studies determining which category of writing anxiety was predominant among learners showed conflicting results. Whereas some studies (Masriani e*t al.*, 2018; Nugroho & Ena, 2021) found cognitive category to be more predominant, other studies (Arindra & Ardi, 2020; Yayli & Genç, 2019) have identified the somatic category to be the more common category of writing anxiety experienced by learners. Still, some other studies (Al-kubaisy *et al*., 2019; Pravita & Kuswandono, 2022) have reported the avoidance behaviour category as the more predominant aspect of writing anxiety suffered by learners.

Nugroho and Ena (2021) explored the categories of writing anxiety among high school students in Indonesia. A quantitative approach was adopted, and the data collection instrument was SLWAI which was administered to a sample of 67 students selected conveniently from a population of 182. The results of descriptive statistics demonstrated that the cognitive category of writing anxiety was the more common category among the participants (M = 3.05; SD = 1.03), slightly differing from avoidance behaviour (M = 3.03, SD = 1.02) and somatic anxiety (M = 2.99, SD = 1.03). Although cognitive anxiety is slightly higher, the difference may be undiscernible. Similarly, Masriani *et al.* (2018) investigated writing anxiety based on its categories. Employing a quantitative approach and using SLWAI

to generate data from a sample of 41 third-year students enrolled at a university in Indonesia, the results of the study revealed that the cognitive anxiety was the more prevalent category among participants (61%) than somatic anxiety (37%) and avoidance behaviour (2%). Although the differences revealed may appear indiscernible, these results suggest that learners tended to experience worry, fear, negative thoughts than they experienced sweating, tension of muscle or avoiding of writing.

However, Arindra and Ardi (2020) have investigated focusing on categories of writing anxiety to determine which of them was more prevalent among Indonesian English major students enrolled at a university. Arindra and Ardi used quantitative approach with descriptive and correlational design. Utilizing SLWAI as instrument for data collection, the data for the study were generated from a sample of 73 students. The results from the descriptive statistical analysis showed that 36% of the 73 participants felt the somatic category of writing anxiety compared to 34% and 31% for cognitive and avoidance behaviour categories, respectively. In addition, a mixed methods design study was carried out by Yayli and Genç (2019) among Turkish students enrolled at a preparatory school in Turkey. Using SLWAI as instrument to collect the quantitative set of data, Yayli and Genç collected data from a sample of 257 students who were described as proficient in English. The descriptive statistics was used to analyse the data. The results indicated that somatic category was the more predominant category (M=2.97) compared to the means of avoidance behaviour category (2.92) and cognitive category (2.85). These results indicate that learners tended to experience bodily symptoms such as sweating, increased heartrate, etc. than worry, fear,

or negative thoughts. While these and other studies reviewed so far found somatic and cognitive categories as the predominant aspects of writing anxiety among learners, other studies found avoidance behaviour as the most prevalent aspect of writing anxiety experienced by learners.

Pravita and Kuswandono (2022) conducted a study which focused on types of writing anxiety among undergraduates writing thesis at a university in Indonesia. Twelve students were purposefully selected to take part in the study. The data were collected through close-ended questionnaire and observation. Using descriptive statistics to analyse the data, the results of the study indicate that avoidance behaviour category (36%) was more predominant among participants compared to cognitive (33%) and somatic (31%) categories of writing anxiety. Similarly, a study by Al-kubaisy *et al.* (2019) focused on the categories of writing anxiety among Iraqi postgraduate students enrolled at a university in Malaysia. Using quantitative approach and SLWAI as data collection instrument, the data for the study was collected from a convenient sample of 100 respondents (50 males and 50 females). Descriptive statistical analysis of data showed that the most widespread writing anxiety category was avoidance behaviour, accounting for a mean score of 4.15, compared to mean score of somatic anxiety (M = 3.58) and cognitive anxiety (M = 3.50). Although these studies contributed significantly in uncovering the categories of writing anxiety, these results are mixed and cannot inform any conclusion. Therefore, additional studies, like the present one, are needed to continue these investigations. That none of these studies was done in the Liberian setting is established; consequently, this has necessitated the present study.

While these studies undoubtedly expanded knowledge on the prevalence of categories of anxiety across contexts, noticeably, a number of issues depict their inadequacy. Besides being predominantly carried out at the university level (Masriani *et al*., 2018; Arindra & Ardi, 2020; Pravita & Kuswandono, 2022; Al-kubaisy e*t al.*, 2019), methodological soundness is somewhat lacking. As noted earlier, Masriani *et al*.'s study did not specify the sampling techniques employed and the population from which the sample of 41 respondents was selected. Likewise, Arindra and Ardi and Al-kubaisy *et al*. failed to indicate the population from which the samples of 73 and 100 were respectively selected. The sampling technique used by Al-kubaisy *et al*. was not explained. Hence, whether the 50 males and 50 females were proportional to gender population sizes is unclear. Moreover, Pravita and Kuswandono's use of convenient sampling in selecting 12 postgraduate students for their study indicates no generalisation can be made from their findings. Besides, Pravita and Kuswandono failed to indicate the population from which the sample was purposefully selected.

Thus, the reasonable conclusion to reach may be that although these studies reported interesting findings, on the whole, they are somewhat procedurally limited. Hence, studies that consider soundness in methodology, such as the present study which employs probability sampling methods for ensuring reppresentativeness and methodological adequacy, are needed. Besides, these inconsistent findings suggest inconclusion and call for further studies to be carried out.

Gender Differences in Levels of Writing Anxiety

Gender differences in levels of writing anxiety have been given considerable attention in prior studies. The findings of the studies are contradictory. Whereas some studies (Al-kubaisy *et al*., 2019; Zareie Khatooni & Ghobadi, 2022) showed that female students experienced a high level of writing anxiety than male students, a study by Jebreil *et al*. (2015) demonstrated that male students experienced a high level of writing anxiety than female students. Still more**,** other studies (Kabigting *et al*., 2020; Quvanch & Kew, 2022) discovered undiscernible gender differences in the levels of writing anxiety among students, although some of the findings indicated that male students' level of writing anxiety is slightly higher than female students, vice versa.

Zareie Khatooni and Ghobadi (2022) conducted a study adopting a quantitative approach, which focused on gender differences among male and female students in terms of their levels of writing anxiety in Iran. A randomly selected sample of 60 (23 males and 37 females) intermediate EFL learners took part in the study. The results of the independent sample *t*-test showed a statistically significant difference between male and female students; female students (M = 50.10) were more highly anxious than male students (M = 41.75); $p < 0.05$.

Similarly, a quantitative study by Al-kubaisy *et al.* (2019) conducted among 100 (50 male and 50 female) postgraduate Iraqi students studying English as a foreign language (EFL) at a university in Malaysia focused on the levels of students' writing anxiety based on gender. The results of the independent sample *t*-test showed that female students' levels of writing

anxiety across all three categories (somatic, M = 3.95; cognitive, M = 3.83; avoidance behaviour, M = 4.18) were significantly higher than that of the male students' levels of writing anxiety per categories (somatic, M = 3.22; cognitive, M = 3.17; avoidance behaviour, M = 3.72). This suggests that female students experienced a significantly higher level of writing anxiety than their male counterparts.

On the other hand, Jebreil *et al*. (2015) studied writing anxiety with focus on gender differences among university students in Iran. A quantitative approach with descriptive design was used in conducting the study. The data collection instrument was SLWAI, administered to 45 students participating in the study. The data were analysed using Independent Sample *t*-test to determine the difference between male and female respondents' levels of writing anxiety. The results showed a statistically significant difference between male students and female students' writing anxiety, with male students (M = 56) experiencing high level than female students (M = 43); $p < 0.05$. However, a further analysis on the basis of the categories of writing anxiety revealed that only cognitive category showed a significant difference between male and female participants, whereas the rest did not. While these results seem to be conflicting regarding gender differences in term of levels of writing anxiety, other studies presented statistically undiscernible differences between males and females.

Kabigting *et al.* (2020) conducted a study among Filipino students enrolled at a high school in the Philippines. Kabigting *et al*. adopted quantitative method with correlational design. The SLWAI was administered to 33 respondents purposively selected to take part in the study. Inferential

statistics using Independent Sample *t*-test was run to determine gender difference in level of anxiety. The results of the study indicated that there was no significant gender difference between male students (M = 71.34) and female students (M = 68.84); $p > 0.05$. Similar results were reported by Quvanch and Kew (2022) among 133 Afghanistan undergraduates. Like Kabigting *et al*. (2020), Quvanch and Kew's (2022) study results indicated that male students' mean score (M = 2.95) was somewhat higher than female students mean score (M = 2.89), but there was no significant difference detected.

Although these studies suggest inconclusion, the findings, on the whole, are promising and thus open ways for more studies. However, making generalisations based on these findings seem problematic for a number of reasons, basically stemming from methodological gaffes, such as limited scope, population, sampling techniques. Zareie Khatooni and Ghobadi (2022), Al-kubaisy *et al*. (2019) and Jebreil *et al*. (2015) alike did not indicate the population from which the 60, 100 and 45 respondents were respectively drawn. Besides, the sampling techniques used were unspecified by the researchers. Moreover, gender proportion of the population that informed the selection of 23 males and 37 females, 50 males and 50 females by Zareie Khatooni and Ghobadi, and Al-kubaisy *et al.*, respectively, was unstated. Likewise, Jebreil *et al.* (2015) did not indicate the gender proportion of their sample.

While the reason for employing inferential statistics, such as *t*-tests, is to make generalisation from the sample to the population, these errors in sampling cannot allow making any sound generalisation. Hence, the need

arises for more methodologically rigorous studies like the present one that follows sound procedures. Unlike these studies that failed to use probability sampling and ensure proportional representation of sample based on gender, the current study employs probability sampling techniques, ensuring proportional representation of subsets of population in the sample.

The Relationship between Writing Anxiety and Writing Performance

Substantial research attention has been paid to studies examining the relationship between writing anxiety and writing performance among learners, with results indicating inconsistency. Some studies (Fitrinada *et al*., 2018; Jin & Guo, 2021; Marija, 2021) reported a statistically significant moderately negative correlation between writing anxiety and writing performance, while other studies (Fakeye & Ohia, 2016; Rehelmi, 2020) found a statistically negative weak correlation. Meanwhile, another studies (Andira & Trisno, 2021; Despita & Pratiwi, 2019) found no statistically significant correlation between writing anxiety and performance in writing.

A study by Fitrinada *et al*. (2018) focused on the relationship between writing anxiety and writing achievement among undergraduate students studying education in English at a university in Indonesia. A purposive sample of 85 students took part in the study. The data were collected using SLWAI for writing anxiety, and writing task for writing achievement. Inferential statistics was run using Pearson Product Moment correlation. The results of the study indicate that there was a statistically significant negative moderate correlation between writing anxiety and writing achievements (r = -.545; p < 0.05). Further analysis indicated that all three categories of writing anxiety (Cognitive, Somatic, and Avoidance Behaviour) revealed a significant

negative moderate correlation (r = -.540; -.481; -.430; $p < 0.05$) respectively. Additionally, Marija (2021) carried a study among EF learners preparing for state exams in Croatia. Marija employed a quantitative approach with correlational design. A sample of 145 students filled out the Daly and Miler's (1975) *Writing Apprehension Test* (*WAT*) to collect writing anxiety data. Writing achievements data were elicited through a writing task given to participants. A correlational analysis show that there was a statistically significant negative moderate correlation between writing anxiety and writing performance (r = -.562; $p < 0.05$).

Moreover, Jin and Guo (2021) examined the relationship between writing anxiety and Chinese high school students' performance in writing. The study employed a quantitative approach using descriptive design. Jin and Guo used SLWAI as data collection instrument and also assigned writing task to participants to collect essay writing performance data. The data were collected data from a sample of 90 students (46 males, 44 females). Both descriptive and correlational analyses were utilised in analysing the data. The results indicated that there was a statistically negative moderate correlation between students' level of anxiety and students' scores in writing task (r = -.580; $p < 0.05$). A further analysis revealed that each category of writing anxiety has significant negative moderate correlation with writing performance scores of participants (r = -.505; $p < 0.05$; r = -.504; $p < 0.05$; r = -.494; $p < 0.05$) for Somatic, Cognitive, and Avoidance Behaviour, respectively.

In contrast, Fakeye and Ohia (2016) carried out a study concentrating on the relationship between writing anxiety and essay writing achievements among English as a second language (ESL) students in Ibadan, Nigeria. The study adopted quantitative approach using descriptive research design. A close-ended questionnaire termed *Writing Anxiety Questionnaire* and an *Essay Writing Achievement Test* were used as data collection instruments administered to a sample of 450 students from six high schools. Pearson correlation was used for data analysis. The results of the study indicated that there was a statistically significant negative weak correlation between writing anxiety and writing achievement (r = -.351; $p < 0.05$). This implies that the higher the level of writing anxiety, the lower the students' achievements in essay writing.

Additionally, Rehelmi (2020) carried out a study focusing on the relationship between writing anxiety and writing performance among Indonesian sixth semester undergraduate students enrolled at a university in Indonesia. Rehelmi adopted the quantitative approach and the correlational design. The sample of the study included all 102 sixth semester students. The data for the study was collected through Cheng's (2004) *Second Language Writing Anxiety Inventory* (SLWAI) for writing anxiety and an essay writing test was administered for writing performance data. A correlational analysis was performed using Pearson Moment Correlation. The results of the study revealed that there was a statistically significant negative weak correlation between writing anxiety and writing performance (r = -.276; $p < 0.05$).

On the other hand, Andira and Trisno (2021) carried out a quantitative study which focused on the relationship between writing anxiety and

achievements in writing among students attending a preparatory school in Indonesia. The population of the study was 243 students from which a sample of 48 was randomly drawn. Employing a quantitative approach, Andira and Trisno used the SLWAI as instrument for data collection and writing task was given to participants to generate writing performance data. The results from Pearson Correlation revealed no significant correlation between writing anxiety and writing performance (r = -.052; p > 0.05). Similar results were reported by Despita and Pratiwi (2019) from a study conducted among eleven graders in Indonesia. Using a quantitative method and correlational design, Despita and Pratiwi administered close-ended questionnaire and a writing task to solicit data from 97 participants. The Pearson correlation results indicated no significant correlation between writing anxiety and writing performance (r = -.053; p > 0.05).

Undoubtedly, the results of these studies shed light on the relationship between writing anxiety and writing performance. While findings suggest inconsistency (moderate, weak, undiscernible correlations), noticeably, no study indicated a positive correlation. However, using these findings to make generalisation will be a mistake because the studies are rather characterised by methodological missteps. Fitrinada *et al*. (2018) study use of purposive sampling to select 85 respondents from a population not specified renders their results limited. Employing correlation, an inferential statistical technique, requires using probability sampling methods. Similarly, the population from which Marija (2021) drew the sample of 145 respondents is unstated. Besides, the instrument (WAT) used by Marija is unidimensional in nature and has been called to question (see Cheng, 2004). Likewise, Jin and

Guo's (2021) study population from which a sample of 90 respondents were drawn is unknown. Further, how the proportion of 46 males and 44 females was derived is unspecified. Unlike these studies, of more promising in terms of representation is the study by Rehelmi (2020), which used census involving all the population of 102 sixth semester students. However, the study was delimited to a single university, suggesting a limitation in scope.

Hence, these mixed results, coupled with methodological inadequacy, suggest that further studies that are methodologically sound are required. is exactly what is sought in this study.

The Influence of Writing Anxiety on Writing Performance

Studies pertaining to the influence of writing anxiety on writing performance showed that writing anxiety has a negative influence on writing performance (Rehelmi, 2020; Fitrinada *et al*., 2018). Rehelmi's study conducted among 102 Indonesian sixth semester undergraduates utilised regression analysis to determine the extent to which participants level of writing anxiety influenced their writing performance. the results of the regression analysis showed that there was a significant influence of writing anxiety on essay writing outcomes of participants (R^2 = .076). This indicates that writing anxiety contributed 7.6% to students' writing outcomes. However, the results did not show to what extent each category of writing anxiety (cognitive, somatic, and voidance behaviour) influenced writing achievement.

Another study undertaken by Fitrinada *et al*. (2018) was intended to examine the influence of writing anxiety on writing outcomes among undergraduate English language majors at a university in Indonesia. A regression analysis was run to determine the influence of the independent

variable (writing anxiety) on the outcome variable (writing achievement). The results of the study showed that writing anxiety significantly influenced writing achievements of students (R^2 = .297). This suggests that writing anxiety contributed 29.7% to students' writing achievements. Further statistical analysis was performed to determine the contribution of each category of writing anxiety on writing achievements. The results showed that cognitive category contributed 29.1%, and somatic and avoidance behaviour categories contributed 23.2% and 18.5%, respectively.

As noted earlier of Rehelmi's (2020) study, its results appear promising. However, it was delimited to one university, and thus limited in scope. As also stated, Fitrinada *et al.* (2018) study has some limitations although it has provided insight into the extent of influence of each aspect of writing anxiety on writing performance. For instance, the study did not clarify the population from which the 85 respondents were drawn.

On the whole, while these studies have provided insights into the influence of writing anxiety on writing performance, they somehow lack methodological rigour. Besides, the discrepancy in the effect sizes (29.7% and 7.6%) here reported indicates that more studies, like the present study, are needed. In the next subsection, writing performance across the levels of writing anxiety is considered.

Writing Performance across Levels of Writing Anxiety

Writing performance of learners across the three levels of writing anxiety (low, moderate, high) appears to be underexplored in the literature. Recent attempts made by Sabti *et al.* (2019) and Balta (2018) revealed promising results. Sabti *et al.*'s study involving 100 intermediate students at a

university in Iraq showed that learners' writing performance differed across the three levels of writing anxiety $F(2, 97) = 48.27$, $p < .05$), with lowly anxious students (M = 71, SD = 7.14) performing significantly higher than moderate anxious students (M = 62, SD = 5.17) and highly anxious students (M = 51, SD = 10.16), whereas moderate anxious students performed significantly higher than highly anxious students. Similar results were found by Balta (2018) among middle school students in Turkey. However, these results are inadequate to reach conclusion. Accordingly, more studies are needed to explore differences in writing performance across the three levels of writing anxiety, a gap which the current study endeavours fill.

In the preceding sections, empirical studies regarding writing anxiety levels, categories, gender differences in the levels of writing anxiety, the relationship between writing anxiety and writing performance, the influence of writing anxiety on writing performance, and writing performance differences across levels of writing anxiety were reviewed. Although conclusions are far from being reached, considering incongruity of findings, the studies have made significant contributions to knowledge, serving as the basis for further studies to be conducted.

Chapter Summary

In this chapter, the review of three sets of literature was presented focusing on theoretical, conceptual, and empirical. Under theoretical review, two theories–the affective filter hypothesis and the three-system response theory of anxiety–were considered. The conceptual review considered the concepts of anxiety, writing anxiety, writing, and essay writing, including their subsections such as types of anxiety, categories of writing anxiety, and

difficulties in writing. The empirical review touched on studies conducted on the levels of writing anxiety, categories of writing anxiety, gender differences in the level of writing anxiety, the relationship between writing anxiety and writing performance, the influence of writing anxiety on writing performance, and writing performance differences across levels of writing anxiety.

CHAPTER THREE

RESEARCH METHODS

Overview

This study was aimed at investigating writing anxiety and essay writing performance among SHS students in Greenville Education District, Sinoe County, Liberia. Specifically, the study was focused on determining the level of SHS students' writing anxiety, the differences in students' cognitive anxiety, somatic anxiety, and avoidance behaviour, differences in SHS students' writing anxiety based on sex, the influence of writing anxiety on students' essay writing performance, and differences in essay writing performance among groups of lowly anxious, moderately anxious, and highly anxious SHS students. This chapter contains the procedures followed in conducting the study. These encompass the research paradigm and the research approach. Other contents of this Chapter include the research design, the study location, population, the sampling technique, the instrument for data collection, the data collection procedures, the data processing and analysis and the ethical considerations. The chapter ends with a summary.

Research Paradigm

Positivism, a research philosophy that holds that there exists a singular reality or truth about a phenomenon, that said truth is independent of our perceptions, and that knowing about such reality can only be possible by the use of scientific methods was adopted for the study. The positivist view indicates that knowledge that cannot be independently confirmed by the use of the scientific methods is speculative or worthless (Kivunja & Kuyini, 2017; Leavy, 2022). While positivism is typically associated with natural sciences,

including physics and biology, which rely on actual observations and experiments to evaluate theories, it has also been utilised in other disciplines (education is no exception) where researchers evaluate data and test hypotheses using statistical techniques (Kivunja & Kuyini, 2017; Barab *et al*., 2007).

This research philosophy encompasses a number of tenets that make it stand out among other philosophical views in research. The idea of verificationism, which asserts that a statement is only valid if it can be verified through empirical observation or scientific experimentation, is one of the fundamental tenets of positivism (Corry *et al*., 2019). Additionally, positivism emphasises the necessity of removing any personal biases that may have an impact on the findings, thus, highlighting the principle of objectivism in scientific study (Ponterotto, 2005).

Even though positivism has influenced scientific inquiry and methods, it has also received criticism for its shortcomings. Some critics argue that several facets of human experience and knowledge, such as ethics, aesthetics, and personal experiences, cannot be quantified or confirmed using scientific means (Leavy, 2022). Other critics contend that positivism can result in a constrained and reductionist view of the world that ignores the intricacies of social interactions and human experiences (Kivunja & Kuyini, 2017).

Notwithstanding these criticisms, this research philosophy was appropriate for the study because the study aimed at determining students' writing anxiety level, gender differences in writing anxiety of students, the prevalence of anxiety, and influence of anxiety on essay writing, all of which required the use of scientific procedures, quantitative or numerical data, and

rigorous statistical analysis. In fact, the level of writing anxiety could not be easily determined without quantification. Moreover, it would be difficult to determine the influence of writing anxiety on students' essay writing performance without numerical data and statistical analysis. Furthermore, it is not possible to determine difference in essay writing performance among lowly anxious, moderately anxious, and highly anxious students without using statistical analysis.

Research Approach

The quantitative approach was employed for the study. The quantitative approach involves the collection of numerical data from a population or subset of the population and the use of statistical means to analyse the data with the aim to determine occurrences, prevalence, effects, and causes (Leavy, 2022). This approach is used in conducting research when the aim of the study is to collect data from a large sample of a population and objectively analyse the data using statistical means. This approach also aims at answering questions such as how many, how much, and to what extent a variable or more occur or aims at determining the extent of differences or relationship between variables under study (Jackson, 2009; Rahman, 2020).

Although the quantitative approach remains a popular research paradigm across many disciplines for its power of generalisability, the approach has its own weaknesses. The most basic of these weaknesses is lack of explanatory power of why a phenomenon occurs, why there are differences observed, and why there are constant changes in social realities over time (Rahman, 2020).

In spite of its limitations, this approach was deemed suitable for the study because the nature of the study; that is, its objectives which were to collect numerical data and use statistical analysis in determining students' writing anxiety level, gender differences in students' writing anxiety and the influence of writing anxiety on students' essay writing performance.

Research Design

A cross-sectional survey design was adopted for the study. A cross-sectional survey design is a type of non-experimental design that involves collecting data from a population or a predetermined subset of a population at one point in time, with the aim to determine trends or prevalence of the phenomenon under study only at the time point of the study, without intend to manipulate any of the variables under study (Connelly, 2016; Creswell, 2018).

According to Leavy (2022), the cross-sectional survey design typically involves gathering data through a survey using questionnaires, interview guides, focused group discussions, etcetera, with the goal to analyse the data in order to determine the frequency or prevalence of the phenomenon under study, as well as to determine relationships and differences between or among variables under consideration. Cohen *et al.* (2017) also affirm that this type of survey aims at collecting data and analysing the data with the intent of describing the frequency, prevalence or widespread of occurrence of the phenomenon under study in a certain demography at a given point in time. Additionally, Connelly (2016) acknowledges that in order to gather information on the frequency of disease, behaviours, intentions, knowledge, attitudes, and respondents' opinions, cross-sectional surveys are extensively used in educational, nursing, medical, and social scientific research. Thus, it

goes without saying that cross-sectional surveys are popular research designs across many disciplines.

Although the cross-sectional survey design is popularly adopted among researchers across many disciplines because of its relative ease, and is somewhat quick to conduct considering its time- and cost-effectiveness, it has a number of limitations, such as impossibility to measure incidence over time and difficulty to ascertain whether a change in one variable causes a change in another over a course of time. In other words, it is impossible to establish causality between one variable and another (Wang & Cheng, 2020). Notwithstanding these limitations, this design is appropriate, given the limited time available to conduct and complete the study. The design was also deemed appropriate for the study because the study aimed to gather numerical data through a structured questionnaire on the thoughts, feelings, and behaviour of respondents toward essay writing. further, determining students' level of writing anxiety, gender differences in students' writing anxiety, differences in students' cognitive anxiety, somatic anxiety, and avoidance behaviour and the influence of writing anxiety on students' essay writing performance demand statistical analysis which necessitated this design.

More importantly, the cross-sectional survey design was adopted because of its cost- and time-effectiveness. That is, this design involves the collection of data at a single point in time. Hence, taking into consideration the short duration of the study, using this design was necessary.

Study Location

The study was conducted in Greenville Education District, Sinoe County, Southeastern Liberia. Greenville, lying on a lagoon close to the Sinoe River and the Atlantic Ocean, is the capital city of Sinoe County, one of the 15 counties of Liberia. Hence, the Greenville Education District was named after the county's capital. Once known as Mississippi in Africa, Sinoe County is located in southeastern part of Liberia, about 150 miles away Monrovia, the capital of Liberia. The town was established in 1838 by freed slaves who were returned to Africa under the auspices of the Mississippi Colonisation Society, and remained an independent colony until 1842 before joining the Commonwealth of Liberia, making it the third original county of the country.

The population of Greenville was 16,434, according to the 2008 census reports. The town hosts one of the seaports of Liberia (the third largest seaport in the country). Besides being the capital of the county and an education district, Grenville is one of the sixteen administrative districts in Sinoe County, and also hosts the largest amount of high schools in the county. This study location was selected purposefully because it has the highest number of senior high schools in the county.

Population

The total population of the study was 1302 (708 males and 594 females) senior high school students enrolled at six high schools in Greenville Education District, Sinoe County, Liberia for the academic year 2022/2023. The enrollment statistics of SHS students across the six high schools in Greenville Education District, Sinoe County, Liberia, are presented in Table 1. As can be observed, the majority of the students are males (N = 708; 54%).

Table 1: Enrollment of SHS Students in Six High Schools in Greenville Education District

No	School	Male	Female	Total
1	School-A	377	296	673
2	School-B	135	86	221
3	School-C	46	32	78
4	School-D	47	60	107
5	School-E	36	27	63
6	School-F	67	93	160
	Total	**708**	**594**	**1302**
		54%	**46%**	**100%**

Source: Fieldwork (2023)

Sample Size

The sample size for the study was determined using the following formula proposed by Yamane (1967), adopted from Singh and Masuku (2014):

$$n = \frac{N}{[1+N(e)^2]}$$

Where, n = sample size; N = population size; and e = margin of error. Thus, applying the formula above, and using the population of the study (1302):

$$n = \frac{1302}{[1+1302(0.05)^2]}$$

$$n = \frac{1302}{4.26}$$

yielded the sample size (n) of 306. Although the Yamane's Formula was used to determine the sample size, using the exact sample size derived may result in error in data analysis in the case of nonresponse. Nonresponse bias happens when some participants fail to return the questionnaire after filling it out or refuse to fill it out, due to the respondents' lack of interest or respondents' fatigue–a situation which may affect the accuracy of data analysis (Dolnicar *et*

al., 2016). Hence, to minimise nonresponse bias, based on the proposal of Andrade (2020) that in order to compensate for nonresponse and ensure adequate representation of the population in the sample, at least 10% of the total sample should be added to the study's sample. Therefore, 10% of the sample which is 31 was added to the initial sample of 306, yielding the total sample size of 337.

Sampling Techniques

A stratified random sampling by proportional allocation was used in selecting the study's sample. This sampling technique is one of the sampling techniques subsumed under the probability sampling design, a sampling design that affords "every item of the universe [having] an equal chance of inclusion in the sample" (Kothari, 2004: 60). The stratified randomly sampling technique was employed because it ensures proportional representation of elements from all strata in the population (Berndt, 2020).

This sampling technique involves a number of steps which were followed during sample selection. Firstly, the overall size of the population was determined using the enrollment statistics provided in Table 1. Secondly, the population was divided into non-overlapping subgroups based on a characteristic of interest, that is, gender (Taherdoost, 2018). Then strata (male and female) were formed, and then the population size of each stratum was determined. Finally, the subsamples of the two strata were combined to form the overall.

In applying the sampling technique, this formula adopted from Kothari (2004) was used: $n_i = n(P_i/N)$; where n_i = sample size to be selected from a stratum; n = sample size of the study; P_i = population of stratum; N = population of the study. Hence, to determine the sample of the male stratum:

$n_i = 306(708/1302)$

$n_i = 306(0.544)$

$n_i = 166$ males.

In determining the sample of the female stratum, the sample of the male stratum was simply subtracted from the overall sample size (306). That is, 306-166 = 140 for the sample size of the female stratum. The total sample drawn from the two strata was 306. However, 10% (31) of the sample was added to the total sample to compensate for nonresponse. Therefore, the overall sample for the study was 337 (183 males and 154 females).

The lottery method was used in selecting the sample from each stratum. In doing this, the researcher wrote on pieces of paper 'yes' and 'no' and thoroughly mixed them in two containers–one for the male stratum and the other for the female stratum. The students were asked one at a time to pick only one piece of paper from the carton without looking. Students who picked 'yes' were selected to participate while students who chose 'no' were not selected for participation. After each selection, the piece of paper was placed back in the carton before the next student picked. This was done one school after another until the total sample for the study was randomly selected from the six senior high schools.

Data Collection Instruments

Th main instrument for data collection was a structured questionnaire adapted from Cheng (2004). The questionnaire is a 22-item Likert type titled *Second Language Writing Anxiety Inventory (SLWAI)*, ranging responses from 1 (*strongly disagree*) to 5 (*strongly agree*). The instrument comprises three sub-constructs relating to the three categories of writing anxiety: cognitive anxiety, somatic anxiety, and avoidance behaviour.

Although the instrument has a strong reliability coefficient of .91 (Cheng, 2004), and has been adopted by several previous researchers without modification, the researcher deemed it fit to adapt it so as to ensure its suitability to the context of the current study. Thus, substantial modifications were made to the SLWAI, and explained in the next few paragraphs.

Firstly, the title of the questionnaire was modified from *Second Language Writing Anxiety Inventory* (SLWAI) to *Senior High School Students Essay Writing Anxiety Scale* (SHSSEWAS). This was done because English is the only language used in the Liberian context for writing composition of any kind. Although the majority of the learners have their first languages (mother tongues), none of their first languages is used in school for writing purpose. Therefore, it was not necessary mention "second language" writing.

Secondly, whereas the 22 items of the original questionnaire (SLWAI) are random, and not arranged according to the three subscales–cognitive, somatic, and avoidance behaviour–the researcher endeavoured to arrange the items according to the categories to which they relate. Put another way, in the original instrument, items 1, 3, 7, 9, 14, 20, and 21 relate to cognitive anxiety, items 2, 6, 8, 11, 13, 15, and 19 relate to somatic anxiety and items 4, 5, 10,

12, 14, 18, 21, and 22 relate to avoidance behaviour. However, in the adapted instrument, items 1-8 relate to cognitive anxiety, items 9-15 relate to somatic anxiety, and items 16-22 relate to avoidance behaviour. This was done to give respondents hint as to what aspect of writing anxiety items they were responding to in the questionnaire and also to provide convenience for statistical analysis. Additionally, because of the rearrangement of the items, seven items (1,4,7,17,18,21,22) in the original instrument negatively worded and required reverse scoring were correspondingly changed to 1,3,6,8,16,21,22 in the modified instrument due to the rearrangement of the items. The reverse scoring is such that responses 5 and 4 indicate *Strongly Disagree* and *Disagree* respectively, 3 remains *Undecided*, 2 and 1 indicate *Agree* and *Strongly Agree* respectively.

After the reverse scoring of the responses, all the responses for each respondent were summed and divided by the total number of items to determine the mean score. Although Cheng (2004) proposed adding the total responses (*Strongly Agree . . . Strongly Disagree*) of each respondent and that a sum of the scores of each respondent below 50 indicates low level of anxiety, a sum between 50 and 65 indicates moderate level of anxiety, and a sum above 65 indicates high level of anxiety, this study adopted the scoring scheme employed by several researchers in categorising respondents' levels of perceptions on five-point Likert type scale into low, medium, and high (Ramli *et al.*, 2013). According to Ramli *et al*., a mean score between 1.00 and 2.33 indicates low level, a mean score between 2.34 and 3.67 show medium level, and a mean score of 3.68 and 5.00 indicates high level of perception. Based on this categorisation scheme, a mean score of writing anxiety between 1.00 and

2.33 indicates low level of writing anxiety, a mean score between 2.34 and 3.67 suggests moderate level of writing anxiety, and a mean score of 3.68 and 5.00 shows high level of writing anxiety. This categorisation of the overall mean level of writing anxiety also applies to the mean levels of the categories of writing anxiety.

Thirdly, several words/phrases which were found inappropriate to the context of the current study and were left out or replaced with more basic ones. For instance, the phrase "English composition" was replaced with essay writing. To reiterate the reason, English is the only language participants use for composition. Using "English composition" could appear that participants use other languages besides English to write their essays. Besides, the term composition sounds too formal; accordingly, its basic form, essay, was considered appropriate for the participants' level.

Finally, a section was added to the original instrument for respondents' demographic information (See **Appendix A** for the final modified instrument).

Following the modification of the instrument, it was shared with the thesis supervisor and other lecturers in the Department who assessed its content validity and considered it acceptable. After that, the instrument was piloted to determine its reliability and consistency.

The five-point Likert scale was used because it is simple to understand and fill out, considering the level of participants (Menold & Bognor, 2016). Additionally, the scale ensures uniformity of responses, allowing ease of statistical computation of the data gathered. Further, the five-point Likert scale provides respondents with an option of uncertainty or a middle point in

expressing their level of agreement or disagreement with any item in the questionnaire Taherdoost (2019).

The second research instrument was teachers' final rosters of respondents scores in English. These rosters were sought from teachers with their consent to collect respondents' scores from which 60% of their first semester averages was computed to represent their essay writing performance.

Pilot-testing of Instrument

Following its modification and content validity, the instrument was administered to thirty (30) SHS students conveniently selected from grades 10, 11, and 12 at a senior high school in Left Bank Education District, Montserrado County, Liberia. After they has filled out the questionnaire, it was collected on the spot. The data were coded into the SPSS version 25 and analysed using reliability statistics. The results from the analysis showed that the instrument was highly acceptable, with an overall Cronbach alpha coefficient of .92, indicating strong internal consistency. Mohamad *et al.* (2015) have affirmed that an instrument with a reliability coefficient within the range of .70-.99 is acceptable.

According to Taherdoost (2018), reliability of a research instrument refers to the instrument consistently yielding similar results when administered under the same condition but at a different time or place. In addition to the result of the overall scale reliability, further analysis of the individual subscales revealed that each of the three subscales was highly reliable, with Cronbach alpha coefficients of .88, .85 and .83 for cognitive anxiety, somatic anxiety, and avoidance behaviour, respectively. These results

indicate that the individual sub-components of the overall instrument are acceptably reliable (Mohamad *et al*., 2015).

Although the instrument was piloted in a different education district and county, the participants for the piloting and those who participated in the actual study share similar characteristics. They are all senior high school students taught using the same language curriculum. Piloting the instrument in Montserrado was purposeful: the cost of printing in Monrovia, Montserrado County, is low compared to the cost of printing in Greenville, Sinoe County. Hence, in order to minimise cost, the instrument was piloted at the location mentioned. Thereafter, the final instrument was printed and taken to the study area for data collection.

Procedure for Data Collection

After obtaining a letter of consent from the thesis supervisor, an introductory letter from the Department of Arts Education, an ethical clearance from the Institution Research Board (IRB) at the University of Cape Coast (UCCIRB/CES/2023/56), a letter of introduction from the Ministry of Education-Liberia (MoE-Liberia), verbal permission from the District Education Officer (DEO) of Greenville Education District as well as the schools' principals, the researcher proceeded with data collection. The researcher visited schools one at a time to collect enrollment statistics of current senior high school students, excluding the dropouts. After collecting the enrollment statistics and determining sample based on gender proportion, a consent form was issued to respondents to read and give their consent for taking part in the study. Overall, the issuance of consent lasted two days. After

obtaining necessary consent and assent, the questionnaire was distributed to the respondents across the six SHSs.

The respondents were asked to fill the questionnaire either on the spot or at a later time of their convenience but not exceeding ten days. Only a few of the respondents filled in the questionnaire on the spot, and it was retrieved from them. Overall, the questionnaire was collected from the respondents' day after day following the issuance over a period of ten days, August 2-12, 2023.

Although 337 copies of the questionnaire were distributed, 313 (93%) of the respondents returned the questionnaire while 24 (7%) of the respondents did not return it. Consequently, the data analysis was only based on the responses of 313 (169 males and 144 females) SHS students. Although 24 participants did not return the questionnaire, the data were not affected by nonresponse bias due to the fact that 10% (n = 31) was added to the sample of the study to compensate for nonresponse and mitigate nonresponse bias.

In addition to collecting essay writing anxiety data from students, essay writing performance data were also collected. The performance data were collected from ten instructors identified as English language teachers after seeking their consent. Students' performance data were represented by their first semester averages in English. Having collected their semester averages, 60% of the average of each student representing essay writing performance was determined. This was done in line with the grading system of Liberia. In the Liberian context, 60% of scores is allocated to essay writing in both teacher-made test and the WASSCE.

The collection of essay writing performance data was predicated on two of the objectives of the study which sought to determine the influence of writing anxiety on essay writing performance and the differences in essay writing performance across groups of lowly anxious, moderately anxious, and highly anxious senior high school students. Having collected the data, a series of steps were taken in processing and analysing the data as described in the subsequent section.

Data Processing and Analysis

The data were coded and keyed into the computer using the Statistical Package for Social Sciences (SPSS) software version 25. After that, the data were cleaned to remove inconsistences, anomalies or outliers. Following the cleaning of the data, variables were computed before analysis. The data were analysed using descriptive statistics and inferential statistics. Specifically, descriptive statistics such as mean, standard deviation, frequency and percentage were employed in analysing Research Question One (what is the level of SHS students' writing anxiety?). For the rest of the research questions and hypotheses, inferential statistics was employed. Repeated measures analysis of variance, (repeated ANOVA) was used in analysing Research Question Two (do differences exist among SHS students' cognitive anxiety, somatic anxiety and avoidance behaviour?). This analysis was adopted because the three variables are related sub-constructs. For Research Question Three (to what extent does writing anxiety influence SHS students' essay writing performance?), Multiple regression was utilised. The Multiple regression analysis was used because there were three predictor variables

(cognitive anxiety, somatic anxiety and avoidance behaviour) running against one dependent or outcome variable (essay writing performance).

Independent-sample *t*-test was employed in analysing Research Hypothesis One (there is no statistically significant difference in writing anxiety between male and female SHS students). The independent-sample *t*-test was appropriate because the Hypothesis sought to test for differences between two independent groups (males and females). Finally, the one-way analysis of variance (One-Way ANOVA) was utilised in analysing Research Hypothesis Two (there is no statistically significant difference in essay writing performance among groups of lowly anxious, moderately anxious and highly anxious SHS students). This analysis was suitable as there were three independent groups involved in the analysis.

Ethical Considerations

The researcher was granted permission by several stakeholders before proceeding with data collection. Permission was granted by the Institution Review Board (IRB), University of Cape Coast, through the issuance of an ethical clearance (UCCIRB/CES/2023/56). Additionally, a letter of consent was issued by the thesis supervisor and introductory letters were obtained from the Department of Arts Education, Faculty of Humanities and Social Sciences Education, University of Cape Coast and from the Ministry of Education, Republic of Liberia.

All of these communications empowered the researcher and were used to seek permission from the County Education Officer (CEO) of Sinoe County and District Education Officer (DEO) of Greenville Education District, as well as from the principals of the six SHSs before proceeding with the data

collection. Prior to the data collection, the purpose of the study was explained to participants in the consent form, where they were assured of confidentiality and anonymity. The participants were informed that their participation in the study was voluntary and that they may withdraw any time without penalty. To ensure anonymity, the participants were told not to write their names or anything on the questionnaire that may identify them. However, for the purpose of matching participants' completed questionnaire with their performance scores, their names were listed and assigned three-digit numbers ranging from 001 to 337 in a space provided on each participant's copy of the questionnaire. These digits were used to identify and match the performance scores collected from English language teachers' final rosters of students' scores in English.

Moreover, to ensure confidentiality during the data analysis, no attempt was made to identify which participant experienced high level, moderate level or low level of writing anxiety. Also, no attempt was made to indicate which participant obtained high, medium or low averages in their semester averages collected. Furthermore, no mention was made of any participant during the discussion of results. The results were discussed as they emerged from the data analysis, and not based on the researcher's subjectivity or preconception of any nature or what the results should be.

Chapter Summary

In this Chapter, the methodology of the study presented. The methodology encompassed research paradigm, research approach and research design which were clearly described with their strengths and limitations explained, followed by justification of why they were adopted. Presented also

in the chapter are the study area/location, the population of the study, the sample size and that sampling techniques. The determination of the sample size was clearly described and sampling technique was explained and justified. Other contents presented in this Chapter include instruments for the data collection and its validation, the pilot testing of the adapted instrument, the procedures for data collection, the data processing and analysis procedures and the ethical considerations, all of which were vividly enunciated.

CHAPTER FOUR

RESULTS AND DISCUSSION

Overview

In this Chapter, the results and discussion to address writing anxiety among SHS students in Greenville Education District, Sinoe County, Liberia are presented. In all, a valid sample of 313 students completed and returned the questionnaire. Performance data were also collected on the valid sample from each of the SHS English language teachers. This Chapter is in two parts. In the first part, the demographic characteristics of respondents are presented and discussed, and in the second part, results are presented and discussed order to address the research questions and research hypotheses formulated for the study.

Demographic Results of Respondents

The demographic characteristics of the respondents were age, sex, and grade level. The data on the respondents' demographic characteristics were solicited to describe the kind of respondents who were involved in the study. More importantly, the sex variable was meant to assess differences in levels of writing anxiety between male and female students. The data on respondents' demographic characteristics were analysed using descriptive statistics (frequency and percentage), and the results are presented in Table 2.

Table 2: Respondents' Demographic Information

Variable	Subscale	Freq.	(%)
		N = 313	
Age (in years)	12-15	16	5.1
	16-20	164	52.4
	21 and above	133	42.5
Sex	Male	169	54.0
	Female	144	46.0
Grade Level	Grade 10	123	39.3
	Grade 11	117	37.4
	Grade 12	73	23.3

Source: Fieldwork (2023)

As observed in Table 2 relative to age distribution, more than half of the respondents (n = 169; 52.4%) fell within the age range of 16-20 years. The concentration of the respondents in this age range is not surprising as Liberia runs a 12-year grade-level system in which children are expected to begin elementary education at age six, enter the SHS level at age 15, and are expected complete SHS at least age 18 (Ministry of Education, 2022).

The results further indicate that a substantial number of the respondents (n = 133, 43%) were within the group of 21 years and more. This could mean that although students are expected to enter the SHS level at age 15, some of the students may enter the SHS level at a later age, and therefore still be in high school beyond 18 years, as the issue of over-aged enrollment has been identified as persistent in the Liberian education sector (Ministry of Education-Liberia, 2022), placing over-aged enrollment rate at over 50%. It could also be that some of the students might have repeated classes or might have dropped out of school due to lack of support and had to restart after some time, which may have led to some of them being in SHS beyond age 18.

Relating to the sex distribution of respondents, the majority of the respondents (n = 169, 54%) were males, as indicated in Table 2. This result is

not a surprise because male students constituted 54% of the population of the study as presented in Table 1. The dominance of male students in the sample of the study was due to the fact that a proportionate stratified random sampling technique was used to obtain a fair representation of respondents' sex in the sample. It is evident that there is little gender disparity in enrollment at the SHS level in Liberia. The latest data released by the World Bank (2021) put the ratio of female to male enrollment at 0.98. This suggests that for every 100 male students enrolled in senior high school, there are 98 females. Several factors have been identified contributing to gender disparity between male and female students' enrollment at the SHS. Some of these factors with supporting evidence include early pregnancy and early childbearing. According to Wreh (2020), about 30% of female teenagers in Liberia between ages 15 and 19 were either found pregnant or had given birth to their first child, with a rapid increase from about five percent at age 15 to about 55% at age 19.

Concerning students' grade level, the results show that over one-third (n =123, 39%) were in Grade 10, slightly higher as compared to Grade 11 (n = 117, 37%) and Grade 12 (n = 73, 23%). Grade 10 having the majority of the respondents compared to grades 11 and 12 (n = 73, 23%) could be that the rate of transitioning from 10^{th} to 11^{th} and to 12^{th} grades may be low. In other words, although students transitioned from the lower secondary level to the upper secondary level (10^{th} grade), some of them might have dropped out or failed to transition to the 11^{th} grade and then to the 12^{th} grade. Having presented and discussed results on students' demographic characteristics, the main results are presented and discussed in the subsequent sections.

Presentation and Discussion of Results

In this section, the results, based on the research questions and hypotheses, are presented. Three research questions and two hypotheses guided the study. The results of the research questions and hypotheses are presented and subsequently discussed in their order. The first research question was framed to address SHS students' level of writing anxiety. The second was formulated to address differences in SHS students' levels of the categories of writing anxiety (cognitive anxiety, somatic anxiety, and avoidance behaviour). The third research question was designed to address the influence of writing anxiety on SHS students' essay writing performance. Also, the first research hypothesis was intended to test for differences in levels of writing anxiety between male and female students, and the second research hypothesis had formulated to test differences in SHS students' essay writing performance among groups of highly anxious, moderately anxious, and lowly anxious students.

SHS Students' Level of Writing Anxiety

The main section of the instrument for data collection consisted of 22 items intended to solicit SHS students' thoughts (cognitive anxiety), feelings (somatic anxiety) and behaviour (avoidance behaviour) toward essay writing. Of the 22 items, eight items related to cognitive anxiety and seven items each related to somatic anxiety and avoidance behaviour.

Adopting a three-level rating categorisation for a five-point Likert scale in the literature, a mean between 1.00-2.33 indicated that the students experienced low writing anxiety, a mean between 2.34-3.67 suggests that the students suffered moderate writing anxiety and a mean between 3.68-5.00

demonstrated that students experience writing anxiety (Ramli *et al.*, 2013). It is important to note that weighted means or means of means of individual items were reported in this study, and not the means of separate items. In other words, the overall mean of writing anxiety is the weighted mean of the 22 items. Similarly, the means of the cognitive anxiety category, somatic anxiety category and avoidance behaviour are the weighted means of the eight items relating to cognitive anxiety and seven items each relating to somatic anxiety and avoidance behaviour.

Consequently, to address Research Question One, which was formulated to determine the level of writing anxiety of SHS students, descriptive statistics (mean, standard deviation, frequency and percentage) were conducted, and the results are presented in Table 3.

Table 3: SHS Students' Level of Writing Anxiety

Variable	Subscale	Freq.	(%)	Min.	Max.	Mean	SD
Cognitive Anxiety	High	86	27.5	1.75	4.75	3.19	.72
	Moderate	190	60.7				
	Low	37	11.8				
Somatic Anxiety	High	106	33.9	1.00	5.00	3.25	.82
	Moderate	163	52.1				
	Low	44	14.0				
Avoidance Behaviour	High	81	25.9	1.29	4.43	3.06	.73
	Moderate	175	55.9				
	Low	57	18.2				
Overall Writing Anxiety	High	77	24.6	2.23	4.55	3.17	.62
	Moderate	216	69.0				
	Low	20	6.4				

Source: Fieldwork (2023)

As reflected in Table 3, SHS students' overall level of writing anxiety was moderate (*M* = 3.17, SD = .62). Also, the number of respondents who experienced moderate level of overall writing anxiety (n = 216 [69%]) were more than half the number who experienced high level overall writing anxiety (n = 77 [24.6%]) and lowly level of overall writing anxiety (n = 20 [6.4%]). The results further show that nearly all of the students (n = 293 [95%]) experienced moderate to high levels of overall writing anxiety.

In relation to the students' levels of the categories of writing anxiety, the results, additionally, show that students' cognitive anxiety (*M* = 3.19, SD = .72), somatic anxiety (*M*= 3.25, SD = .82), and avoidance behaviour (*M* = 3.06, SD = .73) were all moderate. Also relative to frequency across the three categories of writing anxiety, over half of the students experienced moderate cognitive anxiety (n =190 [60.7%]), somatic (n = 163 [52.1%]), and avoidance behaviour (n = 175 [55.9%]). However, more students experienced moderate cognitive anxiety than moderate somatic anxiety and avoidance behaviour. On the other hand, the results indicate that more students experienced high somatic anxiety (n = 106 [33.9%]) than high cognitive anxiety (n = 86 [27.5%]) and avoidance behaviour (n = 81 [25.9%]). It is clearly shown that the majority of students experienced moderate to high levels of cognitive anxiety (n = 297 [88.2%]), somatic anxiety (n = 269 [86%]) and avoidance behaviour (n = 256 [81.8%]).

These findings show that SHS students' overall writing anxiety level was moderate. This suggests that students may experience some level of difficulties in essay writing, as writing anxiety has been identified to have negative impact on students' writing outcomes (Fitrinada *et al*., 2018;

Rehelmi, 2020). Although there is a popular view that anxiety only become debilitative at high level but facilitative at moderate low levels (Brown, 2007), the number of students who experienced high level of overall writing anxiety as reported is substantial. Hence, no absolute claim can be made that since the overall level of students' writing anxiety is moderate, it suggests that students may not face hindrance as a result of writing anxiety when engaged in writing activities. As a matter of fact, a substantial number of the respondents experienced high level of overall writing anxiety. The value of the standard deviation as reported also indicates that there is a substantial deviation from the overall mean. The findings also show that students' cognitive anxiety, somatic anxiety, and avoidance behavior were moderate.

These findings imply that when students are engaged in essay writing, they may encounter problems in writing down their thoughts in meaningful ways due to lack of concentration which may be as a result of worry, fear, shivering–a situation that may have negative consequences on their writing performance. Students may face cognitive disruption and lack of focus in generating ideas during writing activities. Additionally, students may experience bodily arousal and may tend to avoid writing activities due to their levels of writing anxiety. This condition could come about perhaps because students lack linguistic ability or that teachers may mount pressure on the students during writing activities (Abdullah *et al*., 2018).

This could also be attributed to students' lack of constant writing practice, or fear of negative feedback from writing teachers (Sabti *et al*., 2019). Another reason for students' writing anxiety could be that students might have experienced failure in previous writing activities as argued by

DeDeyn (2011) who stated that when learners have prior experience of failure in writing, they tend to develop anxiety towards it. Students' writing anxiety could also be linked with grammar focused-language learning. In the Liberian context, little to no time is allocated to essay writing activities for practice in the classroom. Writing activities are most often given as take-home assignments which are scored without feedback for correction. In fact, the SHS English language curriculum of Liberia allocates little to no time essay writing, whereas most of the language learning activities are grammar teaching and learning (Ministry of Education, 2011).

Writing is a herculean task that demands cognitive resources. The lack of sufficient cognitive resources may result in experiencing anxiety (Zabihi, 2018). It is well acknowledged that second language learners lack automation of retrieving proper linguistic forms from memory due to cognitive overload as a result of competing retrieval efforts in generating thoughts, transforming these thoughts into words, before accounting for grammatical accuracy and spelling (Zabihi, 2018). Hence, helping students to achieve a level of automation during writing may require constant writing practice and exercises, which may make them become conversant with the writing process (Zabihi, 2018).

These findings are novel, although previous studies indicated moderate level of writing anxiety to be present among learners of English as a foreign or second language (Masrani *et al*., 2018; Quvanch & Kew, 2022; Rehelmi, 2020). The novelty of these findings is in the sense that these prior studies were carried out in contexts that were quite different from the Liberian context. Besides, this three-dimensional approach adopted by this study in

examining writing anxiety was not considered by prior studies. Instead, past studies considered writing anxiety to be unidimensional, an approach that failed to account for the three categories (cognitive, somatic, and avoidance behaviour) of writing anxiety.

The findings further confirm the TSRTA which assumes that anxiety responses may manifest in three ways: cognitively, somatically, and behaviourally (Cheng, 2004). This again reveals the novelty of the findings. No previous study in writing anxiety research ever confirm this theory, except Cheng's reference to the TSRTA during the development of the SLWAI.

Although the findings of this study confirm previous findings, they also contradict the findings of other studies which reported that students' overall writing anxiety level was high (Altukruni, 2019; Kurniasih *et al*., 2022; Nugroho & Ena, 2021). Even so, these previous studies' results cannot be generalised to the Liberian context due to differing linguistic background. For instance, Altukruni's study was conducted in Saudi Arabia where English is regarded as a foreign language while English is considered a second language in Liberia and used predominantly as medium of every day communication.

Another evidence of novelty of the findings of the current study is that while previous studies relied on frequencies and percentage in reporting level of students' writing anxiety, this study utilised the mean, standard deviation as well as frequencies and percentages. As a matter of fact, frequencies only tell how many students experience high, moderate, and low levels of writing anxiety. Frequencies do not show the mean value of those levels as proposed by Cheng (2004). Consequently, while previous studies relied only on frequency and percentage to determine the levels of writing anxiety, this study

results show the mean levels as an overall or central representation of respondents' levels of writing anxiety. Additionally, whereas previous studies assessed the level of students' writing anxiety as though writing anxiety were unidimensional, the present study further examined the levels of the three categories of writing anxiety, adopting the multidimensional perspective.

Difference among SHS Students' Cognitive Anxiety, Somatic Anxiety and Avoidance Behaviour

The second research question was formulated to determine differences in students' cognitive anxiety, somatic anxiety and avoidance behaviour. This was intended to confirm if the observed differences in the levels of cognitive anxiety (*M* = 3.19), somatic anxiety (*M = 3.25*) and avoidance behaviour (*M* = 3.06) was statistically significant. Accordingly, in addressing Research Question Two, repeated measures analysis of variance (ANOVA) was conducted at a 95% confidence interval or 0.05 level of significance, and the results of the analysis are presented in Table 4.

Table 4: Differences among SHS Students' Cognitive Anxiety, Somatic Anxiety and Avoidance Behaviour

Source		Type III Sum Squares	Df	Mean Square	F	Sig.
Writing anxiety categories levels	Sphericity Assumed	5.966	2	2.983	10.454	.001
	Greenhouse-Geiser	5.966	1.900	3.140	10.454	.001
	Huynh Feldt	5.955	1.911	3.122	10.454	.001
	Lower-bound	5.966	1.000	5.966	10.454	.001
Error(Writing anxiety categories level)	Sphericity Assumed	178.055	624	.285		
	Greenhouse-Geiser	178.055	592.725	.300		
	Huynh Feldt	178.055	596.255	.299		
	Lower-bound	178.055	312.000	.571		

Source: Fieldwork (2023)

The results of Mauchly's test of sphericity showed a violation, $F(2) = 2.983$, $p < .05$. Hence the Epsilon's values for corrections were considered. As both Epsilon values (Greenhouse-Geiser and Huynh Feldt) were above .75, Huynh Feldt's correction was deemed acceptable (Abdallah, 2019; Babaee *et al.*, 2022), and it was used for the interpretation of the results. As observed in Table 4, the results indicate a significant difference, ($F[1.911] = 3.122$, $p < .001$). It can be concluded that there was a significant difference among students' cognitive anxiety, somatic anxiety and avoidance behaviour. In order to determine where the differences lie, a post-hoc analysis by means of the Bonferroni Pairwise Comparison was run, and the results are presented in Table 5.

Table 5: Bonferroni Pairwise Comparison of SHS Students' Cognitive Anxiety, Somatic Anxiety and Avoidance Behaviour

(I) Writing Anxiety	(J) Writing Anxiety	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval for Difference	
					Lower Level	Upper Level
1	2	-.059	.044	.523	-.165	.046
	3	.131*	.038	.002	.040	.222
2	1	.059	.044	.523	-.046	.165
	3	.191*	.046	.000	.079	.302
3	1	-.131*	.038	.002	-.222	-.040
	2	-.191*	.046	.000	-.302	-.079

***Note*:** 1 (cognitive anxiety); 2 (somatic anxiety); 3 (avoidance behaviour)
Source: Fieldwork (2023)

As indicated in Table 5, there was no significant difference between students' cognitive anxiety (1) and somatic anxiety (2). However, there was a significant difference between students' cognitive anxiety (1) and their avoidance behaviour (3). Also, there was a significant difference between students' somatic anxiety (2) and their avoidance behaviour (3). Thus, it can

be concluded that SHS students' cognitive anxiety is higher than their avoidance behaviour level, and their somatic anxiety level is higher than their avoidance behaviour level, but there was no significant difference detected between cognitive anxiety and somatic anxiety.

These findings are novel, as no study has reported differences using inferential statistics. Previous studies relied on descriptive statistics, predominantly using observed means or frequency to conclude one category of writing anxiety is higher than the others (Arindra & Ardi, 2020; Masriani *et al*., 2018; Nugroho & Ena, 2021; Yayli & Genc, 2019). Even so, these studies were conducted in different linguistic contexts and cannot be generalised to the Liberian setting.

These findings imply that SHS students may face more cognitive or mental interferences and bodily arousal during writing. This may, in turn, impact SHS students writing performance as writing requires organising thoughts before transcribing them on paper. If students have mental interferences during writing, they may fail to do well in their writing activities. Students may lose concentration, which may result in producing texts that are filled with grammatical, rhetorical, and orthographic errors (Al-Shboul & Huwari, 2015; Kirmizi & Kirmizi, 2015). As a consequence of these errors arising from cognitive interferences, students may fail in producing quality writing (Sabti *et al*., 2019).

Additionally, students' comparatively high somatic anxiety suggests that students experienced more bodily arousals like sweating and shivering when they are engaged in writing activities. This may, in turn, lead to students' loss of focus and concentration, a situation that may result in poor

performance in writing. These findings provide insights for practical implications, in that efforts toward reducing SHS students' writing anxiety would focus on ensuring that students are not mentally disturbed when engaged in writing activities. Providing a pacified environment during writing may ease students writing anxiety. Additionally, observable manifestations of anxiety such as sweating and shivering during writing may be identified hands-on when students are undertaking essay writing.

These findings further confirm the TSRTA which assumes that although anxiety responses manifest cognitively, somatically/physiologically, and behaviourally, these responses may manifest equally or unevenly, a phenomenon Rachman and Hodgson (1974) refer to as concordance and discordance. According to Rachman and Hodgson, concordance occurs if there are no differences observed among cognitive anxiety, somatic anxiety and avoidance behaviour or between any two of the three. On the other hand, discordance takes place if there are differences among three or any two of the three categories of anxiety responses.

Consequently, it could be reasonably argued relative to the TSRTA that cognitive anxiety and somatic anxiety were in concordance but there was discordance between cognitive anxiety and avoidance behaviour, and somatic anxiety and avoidance. Focus should then be placed on dealing with SHS students' cognitive anxiety and somatic anxiety. The students' comparatively low avoidance behaviour could be due to the fact that essay writing forms a necessary part of their curriculum. As such, avoiding essay writing may result in failing in the English subject.

Influence of Writing Anxiety on SHS Students' Essay Writing Performance

The third research question was designed to examine the influence of students writing anxiety on their essay writing performance. To address this research question, a multiple linear regression was conducted between the predictor variables (cognitive anxiety, somatic anxiety and avoidance behaviour) and essay writing performance (criterion variable). Prior to conducting the multiple regression analysis, a preliminary analysis was conducted to test for multicollinearity among the three predictor variables. The results of the correlation matrix showed that the predictor variables were moderately correlated, cognitive anxiety and somatic anxiety (r =.499, p < .001), cognitive anxiety and avoidance behaviour (r =.573, p < .001), and somatic and avoidance behaviour (r =.444, p < .001).

According to Chan *et al*. (2022), there is no cause for concern for multicollinearity when there is a moderate correlation between or among predictor variables. Additionally, the tolerance values of all three predictors (cognitive anxiety, 0.58; somatic anxiety, 0.71; avoidance behaviour, 0.64) were higher than 0.1 or 0.2, which further suggests that there was no issue of multicollinearity among the predictors (Prihandoko *et al*., 2022). Furthermore, multicollinearity was assessed by considering the values of the Variable Inflation Factor (VIF). It was found that the VIF values for all three predictor variables (cognitive anxiety, 1.68; somatic anxiety, 1.40; avoidance behaviour, 1.57) were less than 10, which implies that there was no problem of multicollinearity (Prihandoko *et al*., 2022). Hence, multiple regression analysis was conducted. Table 6 contains the results of the analysis.

Table 6: Influence of Writing Anxiety on SHS Students' Essay Writing Performance

Variable	Unstandardised Coefficients		Standardised Coefficients	t-value	p-value
	B	Std. Error	(β)		
(Constant)	49.663	.680		73.076	.001
Cognitive Anxiety	-.516	.234	-.153	-2.207	.028
Somatic Anxiety	-.327	.188	-.110	-1.742	.082
Avoidance Behaviour	-.513	.223	-.154	-2.306	.022
Multiple R		-.344	F value		13.783
R Square value		.118	df		(3,309)
Adjusted R Square		.109	P value		.001

a. Predictors: (Constant), *cognitive anxiety, somatic anxiety, avoidance behaviour*
b. Dependent variable: *Essay writing performance*
Source: Fieldwork (2023)

The results show that there is a linear relationship between the predictor variables (cognitive anxiety, somatic anxiety, and avoidance behaviour) and the criterion variable (essay writing performance), (F[3,309] = 13.783, p < .001). Considering the individual contributions of the predictor variables, the results also show that cognitive anxiety (B = -.516, t = -2.207, p = .028) and avoidance behaviour (B = -.516, t = -2.306, p = .022) negatively predict students essay writing performance. However, somatic anxiety (B = -.327, t = 1.742, p = .082) made no significant contribution to students' essay writing performance. These results suggest that holding all other variables constant, an increase in cognitive anxiety by one unit will lead to a consequent decrease in students' essay writing performance by .516, the coefficient of cognitive anxiety. Similarly, if all other variables are held constant, students essay writing performance will be decreased by .513, which is the coefficient of avoidance behaviour.

Furthermore, the R Square value (R^2 =.118) suggests that about 12% of the variation in students' essay writing performance can be explained by the predictor variables. Finally, the results illustrate that the multiple correlation coefficient was -.344, which indicates a weak negative correlation between cognitive anxiety, somatic anxiety, and avoidance behaviour (predictor variables) and essay writing performance (criterion variable), interpreted based on Schober *et al.* (2018). This suggests that, as writing anxiety level increases, students' performance in essay writing will decrease.

Although the overall effect size is relatively small (11.8%), the findings of this study confirm previous studies which availed consistent evidence of small to moderate effect sizes in writing anxiety research (Fitrinada *et al.*, 2018; Li, 2022; Rehelmi, 2020). Rehelmi's study reported that students' essay writing anxiety could explain only 8% of the variability in their essay writing anxiety. On the other hand, Fitrinada *et al.* revealed that writing anxiety could account for about 28% of the variation in students' writing outcomes. Moreover, a systematic literature review on the effect of writing anxiety on writing outcomes by Li also reported a moderate effect size of writing anxiety on writing performance. On the whole, the findings of this present novel evidence in that there is a tendency of prior studies to treat writing anxiety as unidimensional, although Rehelmi (2020) also adopted the multidimensional approach and reported that all three categories of writing anxiety predicted essay writing outcomes. Even so, in this study, somatic anxiety made no significant contribution to essay writing performance.

The findings of this study are also congruent with the findings of previous studies (Fakeye & Ohia, 2016; Rehelmi, 2020) which reported a significant negative weak correlation between writing anxiety and the writing achievements of students and concluded that as respondents' writing anxiety level increased, there was a consequent decrease in their writing achievement. However, the findings of the present study disconfirm the findings of other studies (Fitrinada *et al*., 2018; Jin & Guo, 2021; Marija, 2021) which found a significant negative moderate correlation. Still other studies did not reveal a significant correlation between writing anxiety and writing performance (Andira & Trisno, 2021; Despita & Pratiwi, 2019).

On the whole, with the exception of Fakeye and Ohia's (2016) study which was carried out in Nigeria, the majority of the previous studies were conducted in the context of English as a foreign language where the language is not frequently used compared to ESL contexts like Nigeria and Liberia.

As can be seen, almost all of these previous studies focused on the relationship between students' writing anxiety and their essay performance. Those researchers who attempted to examine the influence of writing anxiety on writing outcomes could not extend beyond reporting only the effect sizes. However, this study went further by comprehensively examining the influence of students' essay writing anxiety and their essay writing outcomes. While examining relationships can provide evidence for decision-making relative to a phenomenon, the relationship cannot account for exact contributions made by an individual variable to another, as correlation does not imply that a change in one variable causes a change in the other (Gelman *et al*., 220). The findings in this study provide novel insights through the examination of the

influence of writing anxiety on students' essay writing performance. Moreover, whereas previous studies treated writing anxiety as unidimensional, this current study considered writing anxiety as multidimensional.

Accordingly, it examined the unique contributions of each category of writing anxiety to essay writing performance. While writing anxiety was accounts for about 12% of the variability in students' essay writing performance, only cognitive anxiety and avoidance made significant contributions. This suggests that alleviating students' writing anxiety should focus on reducing the levels of fear, worry, negative thoughts (cognitive anxiety) and their behaviour of avoidance essay writing, excusing themselves from essay writing (avoidance behaviour), a practice implication that previous studies could not consider.

Influence of Overall Writing Anxiety on SHS Students' Essay Writing Performance

Given that somatic anxiety did not show a significant influence on students'

essay writing performance, the influence of students' overall writing anxiety on their essay writing performance was further assessed. To determine the extent to which overall writing anxiety predicts essay writing outcome or performance, a simple linear regression was conducted at a .05 significant level, and the results of the analysis are presented in Table 7.

Table 7: Influence of Overall Writing Anxiety on SHS Students' Essay Writing Performance

Variable	Unstandardised Coefficients		Standardised Coefficients	t-value	p-value
	B	Std. Error	Beta		
(Constant)	49.647	.677		73.312	.01
Writing Anxiety	-1.346	.210	-.342	-6.418	.01
R-value	-.342		F value		41.192
R Square value	.117		Df		(1,311)
Adjusted R Square	.114				

a. Predictor: (Constant), Writing anxiety
b. Dependent variable: Essay writing performance
Source: Fieldwork (2023)

The results show that students' overall writing anxiety negatively predicts their essay writing performance ($F[1,311] = 41.192$, $p < .001$). The results also show that there is a significant negative weak correlation between overall writing anxiety and essay writing performance of students ($r = -.342$, $P < .001$). The R-Square value of .117 suggests that overall writing anxiety explains about 12% of the variation in students' essay writing performance, the same as that accounted for by the categories of writing anxiety. As shown by the regression coefficient of overall writing anxiety (-1.346), for every unit increase in the level of overall writing anxiety, there is a corresponding decrease of 1.346 in students' essay writing performance. Although somatic anxiety failed to predict students' essay writing performance, their essay writing performance is predicted by their overall writing anxiety.

These results again confirm the findings of previous studies (Fitrinada *et al.*, 2018; Rehelmi, 2020). Rehelmi's study conducted among Indonesian semester-six students found that writing anxiety accounted for about eight percent of the variation in students' writing achievement. Likewise, Fitrinada

et al. found that writing anxiety explained about 28% of variances in Indonesian undergraduates' writing achievement. While the effect size of 12% is relatively small, it is cause for concern as writing anxiety may lower students' writing outcomes.

Differences in Writing Anxiety between Male and Female SHS Students

The first research hypothesis of the study was designed to address differences in levels of writing anxiety between male and female students. To test this hypothesis, an independent-samples *t*-test was conducted, and the results are presented in Table 8.

Table 8: Differences in Writing Anxiety between Male and Female SHS Students

Variable	Scale	Mean	SD	F	T	Sig.	df
Overall Writing Anxiety	Male	3.17	.65	5.041	-.124	.902	310.633
	Female	3.17	.57				
Cognitive Anxiety	Male	3.17	.74	2.409	-.716	.475	311
	Female	3.22	.69				
Somatic Anxiety	Male	3.28	.83	.025	.574	.567	311
	Female	3.22	.81				
Avoidance Behaviour	Male	3.05	.77	3.915	-.165	.869	310.250
	Female	3.07	.68				

Source: Fieldwork (2023)

The results show that there was no significant difference in levels of overall writing anxiety between male and female students $t(310.633) = -.124$, $p = .902$), for the male students (M = 3.17, SD = .65) and the female students (M = 3.17, SD = .57). The results also indicate that there was no significant difference between male and female students $t(311) = -.716$, $p = .475$) in the levels of the cognitive anxiety for male students (M =3.17, SD = .74) and female students (M = 3.22, SD = .69).

Moreover, there was no significant difference in somatic anxiety between male and female students, $t(311) = .574$, $p = .567$), for male students (M = 3.28, SD = .83) and for female students (M = 3.22, SD = .81). Furthermore, there was no significant difference in avoidance behaviour between male and female students, $t(310.250) = -.165$, $p = .869$), for male students (M = 3.05, SD = .77) and female students (M = 3.07, SD = .68). Consequently, the null hypothesis was retained.

These findings suggest that male and female SHS students tend to equally exhibit writing anxiety responses. In other words, there is no difference in the level of fear, worry, negative expectations, etcetera, (cognitive anxiety) between male and female students. These findings additionally imply that male and female students tended to equally exhibit bodily reactions such as sweating, shivering, increased heartbeat rate, and upset stomach (somatic anxiety) towards essay writing. The findings further suggest that both male and female students may equally avoid undertaking or engaging in writing activities. The implication is that there should be no concern whether alleviating SHS students' writing anxiety should focus more on male students or female students.

The findings of this study are in conformity with the previous evidence provided in the literature (Kabigting *et al*., 2020; Quvanch & Kew, 2022) which showed no significant gender difference among learners of English as a second language and foreign language. However, the current study employed inferential statistics to test for differences whereas past studies, for the most part, relied on descriptive statistics to draw conclusions.

Whereas the findings of the current study agree with previous evidence presented, they contradict the findings of other studies (Al-kubaisy *et al.*, 2019; Zareie Khatooni & Ghobadi, 2022) which revealed that female students were more highly anxious toward writing than male students. Still, an additional study (Jebreil *et al.*, 2015) for instance, provided contrary evidence, reporting that male students were more highly anxious toward writing than female students. All of these pieces of evidence confirming and contradicting the findings of the current study were reported from contexts different from that of the present study. The participants involved in previous studies predominantly came from the background of English as a foreign language unlike in the Liberian context where English is widely used among students.

Differences in Essay Writing Performance among Lowly Anxious, Moderately Anxious and Highly Anxious Students

The second research hypothesis was constructed to address differences in students' essay writing performance among groups of highly anxious, moderately anxious, and lowly anxious students. A one-way analysis of variance (one-way ANOVA) was conducted at a .05 level of significance to test this hypothesis, and the results are presented in Table 9-10.

Table 9: Descriptive Statistics for Essay Writing Performance among Lowly Anxious, Moderately Anxious and Highly Anxious SHS Students

	N	Mean	Std. Deviation
Highly Anxious	77	43.84	2.25
Moderately Anxious	216	45.80	2.24
Lowly Anxious	20	46.80	2.44
Total	313	45.38	2.43

Source: Fieldwork (2023)

Table 10: Differences in Essay Writing Performance among Lowly Anxious Moderately Anxious and Highly Anxious Students

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	259.390	2	129.695	25.505	.001
Within Groups	1576.367	310	5.085		
Total	1835.757	312			

Source: Fieldwork (2023)

Prior to conducting the one-way ANOVA, the assumption of homogeneity of variances was examined by the Levene's test. The results of the Levene's test showed no violation of the assumption of homogeneity of variances in essay writing performance of students among the three groups of students ($F(2,310) = .215$, $p = .807$). The results of the One-Way ANOVA indicate significant differences in students' essay writing performance among highly anxious, moderately anxious, and lowly anxious groups of students ($F[2,310] = 25.505$, $p < .001$). Hence, the null hypothesis that there is no statistically significant difference was rejected. Therefore, it can be concluded that there was a significant difference in essay writing performance among lowly anxious, moderately anxious, and highly anxious students.

Bonferroni's Pairwise Comparison of Essay Writing Performance among Lowly Anxious, Moderately Anxious and Highly Anxious Students

Although it is indicated that there is statistically significant difference, which groups significantly differed in essay writing performance could not be explained by the results of one-way ANOVA. As a result, a post-hoc analysis using the Bonferroni's pairwise comparison was further conducted. The Bonferroni's post-hoc analysis was used because of unequal sample sizes (Machin *et al.*, 2018) of the three groups of highly anxious students (n =77),

moderately anxious students (n = 216), and lowly anxious students (n =20). The results of the analysis are presented in Table 11.

Table 11: Bonferroni's Pairwise Comparison of Essay Writing Performance among Lowly Anxious, Moderately Anxious and Highly Anxious Students

Levels (I)	Levels (J)	Mean Diff. (I-J)	Std. Error	Sig.	95% CI	
					Lower Bound	Upper Bound
High	Moderate	-1.95214*	.29930	.001	-2.673	-1.232
	Low	-2.95584*	.56594	.001	-4.318	-1.594
Moderate	High	1.95214*	.29930	.001	1.232	2.673
	Low	-1.00370	.52706	.173	-2.272	.265
Low	High	2.95584*	.56594	.001	1.594	4.318
	Moderate	1.00370	.52706	.173	-.265	2.272

Source: Fieldwork (2023)

It can be observed in Table 11 that there is a significant difference in essay writing performance between highly anxious and moderately students. The moderately anxious students performed better in essay writing than highly anxious students. The results additionally indicate a significant difference between highly anxious students and lowly anxious. The lowly anxious students performed better in essay writing than highly anxious students. However, there was no significant difference in essay writing performance between the moderately anxious and lowly anxious students.

These are other novel findings in writing anxiety in the Liberian context. While there are similar findings in the literature (Balta, 2018; Sabti *et al.*, 2019), these studies were conducted in different contexts; as such, the findings of those studies cannot be generalised to the context of the current study. The findings of the present study further provide evidence on the widely held belief that anxiety become debilitative at high level but may be

facilitative at moderate and low levels (Brown, 2007; Horwitz *et al*., 1986). This could be why there was no significant difference in writing performance between the moderately anxious and lowly anxious groups, but there was a difference between high and moderate and high and low groups. Although anxiety is known as a negative construct, some level of anxiety is essential to serve as stimulant in undertaking writing (Brown, 2007). When students are too relaxed, they may not take writing activities seriously. Hence, some level of anxiety is needed to trigger them to action in undertaking writing tasks.

The findings of the current study further parallel with the assumption of the AFH, which posits that performance differences among language learners may be accounted for by differences in their level of anxiety (Krashen, 1982; Zafar, 2011). The AFH supposes that learners with heightened anxiety struggle to perform whereas those with low anxiety may attain unhindered achievement. It has, indeed, been established that an inverse relationship exists between anxiety and performance. That is, as anxiety level increases, performance decreases. This was demonstrated not only in writing anxiety research (Fakeye & Ohia, 2016; Sabti *et al*., 2019; Wang, 2020) but also other fields of study such as statistics (Onwuegbuzie, 1999), for instance. The practical implication that can be gleaned from these findings is that alleviating students writing anxiety would first require identifying those who feel highly anxious instead of treating them as equally anxious.

Chapter Summary

Results and discussion were presented in this Chapter in relation to the purpose of the study. The study was aimed at investigating writing anxiety and essay writing performance among SHS students in Greenville Education

District, Sinoe County, Liberia. Specifically, the study focused on determining the level and prevalence of SHS students' overall writing anxiety and differences in students' levels of cognitive anxiety, somatic anxiety and avoidance behaviour. The study additionally examined the influence of writing anxiety on essay writing performance and differences in levels of writing anxiety between male and female students. Furthermore, differences in essay writing performance among highly anxious, moderately anxious and lowly anxious students were assessed.

Both descriptive and inferential statistics were employed analysing the data, using SPSS version 25. The findings of the study revealed that senior high school students' level of writing anxiety was moderate. It was also found that the majority of students experienced moderate level of writing anxiety. A significant difference was found among students' cognitive anxiety, somatic anxiety and avoidance behaviour. However, a multiple comparison results showed that there was no significant difference between students' cognitive anxiety and somatic anxiety except between their cognitive anxiety and avoidance behaviour and between their somatic anxiety and avoidance behaviour. The students' cognitive anxiety and somatic anxiety were higher than their avoidance behaviour.

Additionally, the findings of the study reveal a linear relationship between students' cognitive anxiety, somatic anxiety and avoidance behaviour (predictor variables) and students' essay writing performance (criterion variables). Specifically, students' cognitive anxiety and avoidance behaviour significantly predict their essay writing performance whereas their somatic anxiety makes no significant contribution to essay writing performance.

Moreover, the findings of the study indicate no significant difference in the levels of writing anxiety between male and female students. Furthermore, the findings reveal that there were differences in essay writing performance among groups of highly anxious, moderately anxious, and lowly anxious students. Lowly anxious and moderately anxious students performed significantly higher than highly anxious students. However, there was no difference in essay writing performance between lowly anxious and moderately anxious students.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Overview

In this chapter, the summary of the study, the summary of key findings, the conclusions, the recommendations and suggestions for future studies are presented. The summary of the study covers the purpose and objectives of the study, the research questions and hypotheses, the relevant theories reviewed and the research methodology including its the contents. Under the summary of key findings, the main findings from the study are summarised based on the order of the research questions and hypotheses. Conclusions were made based on the findings. Recommendations were also made based on the conclusions, and suggestions were advanced for future research. The Chapter ends with a summary.

Summary of Study

The study was generally aimed at investigating writing anxiety and essay writing performance among SHS students in Greenville Education District, Sinoe County, Liberia. The study specifically focused on determining the level of writing anxiety of SHS students and examining differences in students' cognitive anxiety, somatic anxiety and avoidance behaviour. It also focused on determining the influence of writing anxiety on students' essay writing performance, assessing differences in writing anxiety between male and female students and determining differences in essay writing performance among lowly anxious, moderately anxious, and highly anxious students. Based on these objectives, the study was guided by three research questions and two research hypotheses. The research questions included: (1) *What is the*

*level of SHS students' writing anxiety? (*2) *Do differences exist among SHS students' cognitive anxiety, somatic anxiety, and avoidance behaviour?* and (3) *To what extent does writing anxiety influence SHS students' essay writing performance?* The two research hypotheses were: (1) *There is no statistically significant difference in writing anxiety between male and female SHS students and* (2) *There is no statistically significant difference in essay writing performance among groups of lowly anxious, moderately anxious, and highly anxious SHS students.*

The study was undergirded by two theories of anxiety: namely, the affective filter hypothesis and the three-system response theory of anxiety. The positivist paradigm and the quantitative approach were adopted given the purpose of the study. Also predicated on the purpose of the study, the cross-sectional survey design was adopted. The main data collection instrument was a structured questionnaire, used to anxiety data from the respondents. In addition, English language teachers' final rosters for the English language was the second research instrument. The data for the study were collected from 313 respondents sampled from a population of 1302 SHS students, using proportionate stratified random sampling technique. Additionally, 60% of students' semester averages in English were computed from scores contained in the final rosters provided by the English language teachers to represent students' essay writing performance scores. Using SPSS version 25, both descriptive statistics and inferential statistics employed in analysing the data.

Key Findings

The following findings emerged from the study, following both descriptive and inferential statistical analyses of the data:

1. The study revealed that SHS students in Greenville Education District, Sinoe County, Liberia, experienced a moderate level of overall writing anxiety (M = 3.17). Additionally, it was found that students' cognitive anxiety (M = 3.19), somatic anxiety (M = 3.25) and avoidance behaviour (M = 3.06) were at moderate level. It was also found that the majority of the students (n = 216 [69%]) reported experiencing a moderate level of overall writing anxiety. These findings imply that most of the SHS students feel neither highly anxious nor lowly anxious when they engage or are expected to engage in essay writing. Students' cognitive reactions (worry, fear and negative thoughts) and their somatic reactions (sweating and shivering) as well as their avoidance behaviour (avoiding, skipping and excusing) toward essay writing are neither too severe nor too minimal.
2. It was found that there was a statistically significant difference between students' levels of cognitive anxiety ([M = 3.19] and avoidance behaviour [M = 3.06], p = .002) and between their levels of somatic anxiety ([M = 3.25]) and avoidance behaviour [M = 3.06], p = 046]. However, there was no significant difference between students' levels of cognitive anxiety and somatic anxiety (p = .523). This means that students are not inclined to avoiding essay writing because essay writing is a necessary part of their English language curriculum. As a consequence, students may equally show fear and worry and shiver,

sweat and feel tension when they engage or are expected to engage in essay writing. Simply put, students' avoidance behaviour is comparatively low than their cognitive reactions and somatic reactions to essay writing.

3. The study revealed a negative linear relationship between cognitive anxiety, somatic anxiety and avoidance behaviour (predictor variables) and essay writing performance (criterion variable) (F[3,309] = 13.783; r = .342, p < .05). Regarding the individual contribution, it was found that cognitive anxiety (B = -.516, t[73.076] = 2.207, p = .028) and avoidance behaviour (B = -.513, t[73.076] = 2.306, p = .022) significantly predict essay writing performance, whereas somatic anxiety does not make a significant contribution to essay writing performance (B = -.327, t[73.076] = -1.742, p = .082). It was, as well, revealed that cognitive anxiety, somatic anxiety, and avoidance behaviour accounted for about 12% of the variability in students' essay writing performance. These findings imply that as students writing anxiety level increases, their essay writing performance will decrease. Specifically, as students' cognitive anxiety and avoidance behaviour levels increase, students essay writing performance will decrease by .516 and .513, respectively. However, an increase in students' somatic anxiety level does not affect students' essay writing performance.
4. In connection to sex differences, the study found that there was no significant difference in the overall writing anxiety between male and female students (t[310.633] = -.124, p = .902) for males (M= 3.17) and females (M = 3.17). Moreover, there was no significant difference in

cognitive anxiety between male and female students (t[311] = -.716, p = .475), with male students (M = 3.17) and female students (M = 3.22). Also there was no difference in somatic anxiety between male and female students (t[311] = .574, p = .567), for male students (M = 3.28) and female students (M = 3.22). The study further revealed that there was no difference in avoidance behaviour between male and female students (t[310.250] = -.165, p = .869) for male students (M = 3.05) and female students (3.07). This means that both male and female students, on average, equally experienced overall writing anxiety. They also equally experienced cognitive reactions, somatic reactions and avoidance behaviour toward essay writing.

5. Concerning essay writing performance difference among lowly anxious, moderately anxious and highly anxious students, the study revealed a significant difference (F[2,310] = 25.505, p = .001). Further analysis showed that students differed in essay writing performance between highly anxious group (M =43.89) and moderately anxious group (M= 45.80), p = .001 and between highly anxious group and lowly anxious group (M = 46.80), p = .001. Moderately anxious and lowly anxious students performed higher in essay writing than highly anxious students. However, there was no significant difference in essay writing performance between moderately anxious and lowly anxious students (p = .807). This indicates that students who experienced high writing anxiety did not perform well in essay writing compared to those who experienced moderate and low writing anxiety.

Conclusions

This study was aimed at investigating writing anxiety and essay writing performance among SHS students in Grenville Education District, Sinoe County, Liberia. The study was particularly focused on the level of writing anxiety, differences in cognitive anxiety, somatic anxiety and avoidance behaviour. The study was specifically also aimed at determining the influence of writing anxiety on essay writing performance, gender differences in writing anxiety levels and essay writing performance differences among highly anxious, moderately anxious and lowly anxious students. Based on the findings of the study, five major conclusions had been drawn. They are presented in order of the objectives of the study.

Relative to the first objective of the study which sought to determine the level of writing anxiety among senior high school students, based on the findings, it is concluded that SHS students in Greenville Education District experienced moderate level of overall writing anxiety. In relation to the level of the categories of writing anxiety, it is also concluded that SHS students experienced moderate level of cognitive anxiety, somatic anxiety and avoidance behaviour. A moderate level could mean that students' writing anxiety may not be debilitative but facilitative, a view held by some researchers. However, some researchers argue that moderate level of writing anxiety could cause students to feel considerable negative stimulations during essay writing tasks. On the whole, a moderate level of writing anxiety may not be alarming but it is a cause for concern, as the majority of the students experienced moderate to high level of writing anxiety, meaning that students are neither too relaxed nor too severely negatively stimulated about essay

writing tasks. Students may have some level of fear, worry, and negative thoughts toward essay writing on average but not to an extent that is debilitative.

The second objective of the study was intended to examine differences in students' cognitive anxiety, somatic anxiety and avoidance behaviour. Based on the findings, it is concluded that there is a significant difference among SHS students' cognitive anxiety, somatic anxiety and avoidance behaviour. It is also concluded that students experienced significantly higher cognitive anxiety and somatic anxiety than avoidance behaviour. It is additionally concluded students experienced cognitive anxiety and somatic anxiety equally. Students' higher cognitive anxiety and somatic anxiety could mean that students fear and worry about essay writing. Also, their high somatic anxiety suggests that students bodily react to essay writing. That students' avoidance behaviour is low is indicative of the fact that students have no option to veer from essay writing. Essay writing is a necessary part of their curriculum.

With regard to the third objective of the study which was proffered to determine the influence of writing anxiety on essay writing performance, it is concluded cognitive anxiety, somatic anxiety and avoidance (predictors) negatively predict students' essay writing performance. This means an increase in these predictor variables collectively may lead to decrease in students' essay writing performance. Relative to individual contribution of the predictors, it is also concluded that students' cognitive anxiety and avoidance behaviour make significant contribution to students' essay writing performance, but somatic anxiety does not contribute to students' essay

writing performance. This suggests that when students' cognitive anxiety and avoidance behaviour increase, students' essay writing performance will decrease but an increase in students' somatic anxiety will not affect students' essay writing performance. It is additionally concluded that a significant negative linear relationship exists between students' cognitive anxiety, somatic anxiety and avoidance behaviour and their essay writing performance.

About the fourth objective which sought to determine gender differences in writing anxiety among SHS students, it is concluded that there is no significant difference in students' overall writing anxiety between males and females. It is also concluded that male and female students do not significantly differ in their cognitive anxiety, somatic anxiety and avoidance behaviour. It implies that both male and female students equally experienced overall anxiety. They also equally experienced cognitive anxiety, somatic anxiety avoidance behaviour.

The final objective of the study was designed to examine essay writing performance differences among groups of highly anxious, moderately anxious and lowly anxious students. Based on the findings, it is deduced that there is significant difference in essay writing performance among highly anxious, moderately anxious and lowly anxious students. It also concluded that lowly anxious and moderately anxious students performed better in essay writing than highly anxious students. The lowly anxious and moderately anxious students perform equally in essay writing. This is further a cause for concern which should target reducing students' writing anxiety to a minimum.

Recommendations

The following recommendations aimed at dealing with and minimising or mitigating students' writing anxiety level are made based on the findings and conclusions of the study:

a. English language teachers should have an awareness of the detrimental effect of negatively evaluating students' writing outcomes as students' fear of evaluation contributes to their writing anxiety. This awareness should be championed by teacher's training institutions and programmes through in-service training and workshops. The awareness should focus on English language teachers' tolerance of students' errors in essay writing. English language teachers should, as well, play the role of counselors, counseling students who may exhibit writing anxiety symptoms such as fear, worry, shivering, sweating the students are engaged in writing tasks, and when they also show behaviours like avoiding writing and delaying in completing writing tasks in their classrooms.

b. English language teachers should pay more attention to students who seem to worry and show signs of fear when they engage in or are expected to engage in essay writing. English language teachers should also pay careful attention to and help by counseling students who show signs of shivering, sweating, experiencing headache when they are engaged in essay writing tasks.

c. English language teachers help students reduce their fear and worry (cognitive anxiety). They should serve as counsellors in their classroom. Their helps should target boosting students' self-confidence

and avoid giving negative feedback on students written products. The English language teachers should also make the classroom environment be such that the students with fear and worry about writing and those with high writing self-efficacy are treated equally. Additionally, English language teachers should identify and counsel students who are predisposed to giving excuses about writing assignments or tests procrastinate or delay in turning in writing assignment (avoidance behaviour).

d. Efforts by English language teachers to help SHS students reduce their writing anxiety should target both males and females. This should be done by teachers indiscriminately identifying students who show signs of writing anxiety irrespective of their sex.

e. English language teachers should endeavour to identify students who show symptoms of severe writing anxiety and exclusively deal with them aimed at minimising their writing anxiety level. English language teachers' effort should gear toward establishing three groups of students–those showing severe symptoms, moderate symptoms and low symptoms of writing anxiety. They should then design means of paying special attention to those exhibiting severe symptoms of writing anxiety.

Suggestions for Further Studies

Although the study sheds light on writing anxiety in the Liberian context, it was conducted in a single education district. Consequently, it is suggested that more empirical studies be conducted in the Liberian context to unravel writing anxiety in other education districts across the country,

considering age differences, grade differences, school differences, as well as other socio-cultural variables such as learners' economic background, religious leaning, and favourite subjects. Besides, findings of previous studies on writing anxiety conflicting. This suggests that more research is still needed. Therefore, it is suggested that further research continues in exploring writing anxiety in various contexts.

Chapter Summary

In this Chapter, the summary of the study covering the purpose and objectives of the study, the research methods and design, including population, sample and sample techniques, the instrument for data collection, data type collected, and data processing and analysis procedures were dealt with. A summary of key findings was based on research questions and hypotheses. Other contents presented in the chapter included conclusions, recommendations, and suggestions for further studies. Also presented in this chapter were the research questions and hypotheses under which the summary of key findings was reported.

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APPENDICES

APPENDIX A: QUESTIONNAIRE

Research Instrument: Senior High School Students Essay Writing Anxiety Scale (SHSSEWAS)

UNIVERSITY OF CAPE COAST
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES EDUCATION
DEPARTMENT OF ARTS EDUCATION

SENIOR HIGH SCHOOL STUDENTS ESSAY WRITING ANXIETY SCALE (SHSEWAS)

Introduction

My name is Morris A. Sackor. I am a graduate student of the University of Cape Coast in Ghana, pursuing a Master of Philosophy in Arts Education/English. I am doing research on the topic "Writing Anxiety and Essay Writing Performance". Any information you provide will be used only for the purpose of this research. Your identity will not be shared with anyone or any institution. Your participation in this study is voluntary and you may withdraw anytime you wish to do so. Thank you very much.

This questionnaire has two sections. **Section One** is intended to collect information about you, such as your age, your gender, your grade level, and your school. **Section Two** asks you for information about how you ***think, feel*** and ***behave*** toward essay writing.

SECTION ONE: *RESPONDENTS BACKGROUND INFORMATION*

This section asks you for information concerning your age, gender, grade level, and school. Please tick the box corresponding to your response.

a. Below 12yrs ☐
b. 12-15yrs ☐
c. 16-20yrs ☐
d. 21yrs & above ☐
e. Male ☐
f. Female ☐
g. 10th grade ☐

h. 11th grade ☐
i. 12th grade ☐
j. Sinoe Multilateral High School ☐
k. St. Joseph Catholic High School ☐
l. Seebah High School ☐
m. United Methodist High School ☐
n. St. Paul Episcopal High School ☐
o. Sinoe Extension High School ☐

SECTION TWO: *RESPONDENTS' THOUGHTS, FEELINGS, AND BEHAVIOUR TOWARDS ESSAY WRITING*

This section asks you for information on how you ***think***, ***feel***, and ***behave*** toward essay writing. This section has three sub-sections. **Subsection One** asks you for information about how you ***think*** toward essay writing; **Subsection Two** asks you for information about how you ***feel*** toward essay writing, and **Subsection Three** asks you for information about how you ***behave*** toward essay writing.

SUB-SECTION ONE: *RESPONDENTS' THOUGHTS TOWARDS ESSAY WRITING*

*This subsection asks you for information about how you **think** toward essay writing. It is about what **goes on in your mind** when you hear about or write an essay. This subsection has eight (8) statements. Please show your level of agreement with each statement by ticking.*

Note: *1= Strongly Disagree; 2= Disagree; 3= Undecided; 4= Agree; 5= Strongly agree*

No	Statement	Response options				
		1	2	3	4	5
1	When I am writing essays, I don't worry at all.					
2	When I am writing an essay, I feel worried if I know teachers will mark it.					
3	I don't worry that my essays are a lot worse than my friends' essays.					
4	If my essay is to be graded, I would worry about getting a very poor grade.					
5	I'm afraid that other students would laugh at me if they read my essay.					
6	I don't worry at all about what other students would think of my essay.					
7	I'm afraid of my essay being chosen as a sample to be talked about in class.					
8	I'm not afraid at all that my essay would be rated as very poor.					

SUBSECTION TWO: *RESPONDENTS' FEELINGS TOWARDS ESSAY WRITING*

*This subsection asks you for information about **how you feel** when you are writing an essay or expecting to write an essay. This subsection has seven (7) statements. Please show how you **agree** with each statement by ticking.*

Note: *1= Strongly Disagree; 2= Disagree; 3= Undecided; 4= Agree; 5= Strongly agree*

No	Statement	Response options				
		1	2	3	4	5
9	I feel my heart beating when I write an essay in a short period of time.					
10	My mind often goes empty when I start to write an essay.					
11	I shake or sweat when I write an essay under time pressure.					
12	My thoughts become confused when I write under time limits.					
13	I often feel panic when I write an essay under a limited time.					
14	I freeze up when I am not told on time but asked to write an essay right away.					
15	I usually feel my body tense when I write an essay.					

SUBSECTION THREE: *RESPONDENTS' BEHAVIOUR TOWARDS ESSAY WRITING*

*This subsection asks you for information about how you **behave** toward essay writing. This subsection has seven (7) statements. Please show how you **agree** with each statement by ticking.*

Note: *1= Strongly Disagree; 2= Disagree; 3= Undecided; 4= Agree; 5= Strongly agree*

No	Statement	Response options				
		1	2	3	4	5
16	I often choose to freely write down my thoughts in essays.					
17	I usually find excuses to avoid writing essays.					
18	I do my best to avoid situations in which I have to write essays.					
19	Except I have no choice, I would not write essays.					
20	I would do my best to excuse myself if asked to write essays.					
21	I usually look for means to write essays outside my class.					
22	Whenever possible, I would like to write essays.					

Thank you for taking part in this study, and for taking the time to fill out the questionnaire.

APPENDIX B: ETHICAL CLEARANCE

UNIVERSITY OF CAPE COAST

INSTITUTIONAL REVIEW BOARD SECRETARIAT

TEL: 0558093143 / 0506878509
E-MAIL: irb@ucc.edu.gh
OUR REF: IRB/C3/Vol.1/0268
YOUR REF:
OMB NO: 0990-0279
IORG #: IORG0011497

26TH JULY, 2023

Mr Moris A. Sackor
Department of Arts and Social Sciences Education
University of Cape Coast

Dear Mr Sackor,

ETHICAL CLEARANCE – ID (UCCIRB/CES/2023/56)

The University of Cape Coast Institutional Review Board (UCCIRB) has granted Provisional Approval for the implementation of your research on **Writing Anxiety and Essay Writing Performance among Senior High School Students in Greenville Education District, Sinoe County, Liberia.** This approval is valid from **26th July, 2023** to **25th July, 2024**. You may apply for an extension of ethical approval if the study lasts for more than 12 months.

Please note that any modification to the project must first receive renewal clearance from the UCCIRB before its implementation. You are required to submit a periodic review of the protocol to the Board and a final full review to the UCCIRB on completion of the research. The UCCIRB may observe or cause to be observed procedures and records of the research during and after implementation.

You are also required to report all serious adverse events related to this study to the UCCIRB within seven days verbally and fourteen days in writing.

Always quote the protocol identification number in all future correspondence with us in relation to this protocol.

Yours faithfully,

Koti F. Amuquandoh
Ag. Administrator

Appendix C: Letter of Introduction from the Department of Arts Education, University of Cape Coast

UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
FACULTY OF HUMANITIES & SOCIAL SCIENCES EDUCATION
DEPARTMENT OF ARTS EDUCATION

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University Post Office,
Cape Coast, Ghana.

OUR REF: DAsE/SM/11

YOUR REF: *Date:* 11th April, 2023

The Chairman
Institutional Review Board
University of Cape Coast
Cape Coast

Dear Sir,

REQUEST FOR ETHICAL CLEARANCE – MORRIS A SAKOR

We forward herewith an application for ethical clearance from Mr. Morris Alex Sakor an MPhil regular student at the Department of Arts Education who is conducting a research on the topic **"Writing Anxiety and Essay Writing Performance among Senior High School Students in Greenwille Education District, Sinoe County, Southeastern Liberia"**.

He will therefore need ethical clearance to enable him carry out the research successfully.

Counting on your maximum co-operation.

Thank you.

Yours faithfully,

PROF. CHARLES ADABO OPPONG
HEAD OF DEPARTMENT