



WRITING BOREDOM COPING STRATEGIES, AND WRITING COMPOSITION PERFORMANCE. EXPLORING THE POSSIBLE RELATIONSHIP IN THE PAKISTANI ESL CONTEXT

Radiya Rani

Lecturer in English, Rashid Latif Khan Medical University, Lahore

Email: radia.asif1990@gmail.com

Saimaan Ashfaq

English Lecturer Islamia University of Bahawalpur

Email: saimaashfaq040@gmail.com

Hafsa

PhD English (Linguistics) scholar, University of Education Lahore

Email: hafsah881997@gmail.com

Abstract

The term boredom is a well-researched variable by researchers in various contexts. However, limited research exists regarding the relationship of boredom with writing composition performance. Thus, to fill this gap, this study aims to determine the relationship between writing boredom and writing composition performance by employing writing boredom coping strategies as a mediating variable. This research was conducted by using a quantitative research approach and a correlational research design was used. Questionnaires and writing composition tests were used to gather the data from 200 Pakistani ESL undergraduate students for this research. The data was collected from undergraduate students studying at Fast University. To analyze the collected data, the study used SPSS software along with a measurement model and linear regression. The findings of the study demonstrated a strong but negative connection between writing boredom and writing composition performance. Additionally, writing boredom was strongly and positively related to writing boredom coping strategies. Moreover, writing composition performance revealed a favorable and significant relationship with writing boredom coping strategies. Finally, this study revealed that the relationship between writing and writing composition performance was mediated by writing boredom coping strategies.

Key Words: *Writing Boredom, Writing Composition, ESL*

Introduction:

A process in which a writer explains his/her perception and feelings by using alphabets and punctuation to communicate is known as writing (Chowdhury, 2015). Writing is a powerful term by which anyone can express his/her beliefs by putting it on to the page or even on computers. It is an important part of our communication because with this we can enhance our skills and refine our ideas (Chowdhury, 2015). It can also promote us to explain our beliefs to others. Moreover, it is a primary basis on which someone's learning can be evaluated. Writing is a flexible tool that can be used to meet a variety of goals (Fulwiler, 2002; Graham, 2006).

Writing is one of the best ways to communicate and express thoughts and emotions. The ability to produce language is a significant one. When it comes to writing in the English language, which is frequently utilised for global knowledge mediation, its value increases. (Mahboob, 2014; Mansoor, 2005; Marlina & Giri, 2014; Rahman, 2002). Pakistani students face many difficulties and problems while writing anything in English. Though it is one of the excellent ways of expressing thoughts and ideas, Pakistani students often cannot convey



the meaning exactly to the reader through their writing. This is because of lack of proficiency in the language, developing ideas, organizing ideas, maintaining paragraph unity, large classes, lack of motivation, lack of resources and due to lack of knowledge about the English grammar (Asriati, 2017 & Tirumalesh, 1991).

Moreover, students believe that learning grammatical rules is difficult and grammatical errors hinder their writing performance (Chowdhury, 2015). In Pakistan, the writing performances of students are not up to the mark. In 2013, English language users have expanded from 2% to 49% although they continue to have issues with the English language, particularly with writing. (Dar & Khan, 2015). Mostly they face issues in syntax, grammar structure, idea expansion, coherence, content selection, organization, lack of vocabulary and inappropriate use of vocabulary. Writing skills of English language is important in both professional or academic context where English is a language to communicate in first, second, official or foreign language (Kurt & Atay, 2007; Latif, 2007; Ryan, 2014). Writing is one of the most powerful forms of communication that exists today. Writing skills are essential to excel not only in academic pursuits but also in many professional and personal endeavors. Here are some features that gives an explanation on the importance of writing:

1. Importance of Writing Skills in Professional Settings: Clear and effective writing skills are essential for professionals to communicate with colleagues, clients, and stakeholders effectively. This is especially important for industries like healthcare, where a lack of writing skills can result in serious consequences (Reed, 2019).
2. Importance of Writing Skills in Academic Pursuits: Writing skills are crucial for academic pursuits. Students who learn to write effectively are better equipped to convey their ideas and arguments clearly and engage the reader. Students with strong writing skills are also more likely to succeed in college and pursue academic excellence (Graham & Perin, 2007).
3. Importance of Writing Skills in Personal Life: Writing can be an outlet for self-expression, creativity, and critical thinking. The ability to write well enables individuals to communicate their thoughts and feelings effectively, whether in personal letters, journals, or blogs (Gertz, 2019).

Overall, strong writing skills are essential to success in many areas of life, including but not limited to academic, professional and personal.

Interestingly, the past researchers paid a lot of attention to the term boredom in numerous contexts, however there is not much research conducted in the context of writing boredom. There is no fixed definition for boredom because it is a complex variable that is rooted in a variety of factors (Ally et al., 2008). Boredom results in feeling disengaged, therefore leading to avoidance behavior.

Interestingly, the past researchers paid a lot of attention to the term boredom in numerous contexts, however there is not much research conducted in the context of writing boredom. There is no fixed definition for boredom because it is a complex variable that is rooted in a variety of factors (Ally et al., 2008). Boredom results in feeling disengaged, therefore leading to avoidance behavior.

Boredom leads to inefficient performance as a result of psychological wellness issues. The sentiments of students play a major role in boosting the process of learning and motivation (Graesser & D'Mello, 2012, Hokka et al., 2019; Pekrun et al., 2002; Trevors et al., 2017). Numerous researchers have paid a lot of attention to the term boredom in several areas like



education, educational psychology and psychology (Mora, 2011; Sharp et al., 2017; van Tilburg & Igou, 2017).

According to Pawlak et al. (2020), boredom might be seen as a more situation-based characteristic. State boredom is described as a transient, situation-based, short-term syndrome that is anchored in a person's perception of their learning environment (Bench & Lench, 2013). Moreover, trait boredom which refers to an inherent part of an individual's personality. It is further classified into two factors i.e., Internal proneness boredom relates to a person having problems with their current activity, whereas external proneness boredom refers to a dull setting (Macklem, 2015).

According to a recent study, the additional elements contributing to the awkwardness of a student's feelings inside and outside the classroom, when a student's perception is negatively impacted, when learners lack sufficient L2 abilities, when activities are challenging, when they are overloaded with information, and when they struggle to come up with original ideas. The aforementioned elements all contribute to boredom (Nakamura et al., 2021).

Problem Statement:

Students' academic and professional careers depend on their ability to write. Learning persuasive writing techniques is necessary for expressing one's thoughts on a certain topic. Students in Pakistan are unable to express themselves in writing as a result of rote learning and exam-based learning strategies. Even after twelve years of English instruction, student's still struggle to write independently on any given topic. (Muhammad, 2012).

The Pakistani ESL learners have many problems in writing because they are not familiar with the writing components. They do grammatical errors because they are not familiar with the grammatical structure. They also have problems in syntax structure, ideas expansion, organization of ideas, topic sentence, inappropriate use of vocabulary and they also do spell mistakes. They find difficulty while writing in English because they do not know the sentence structure and how to use the appropriate vocabulary, where to use punctuation marks, apostrophes, commas, exclamations, brackets, semicolons, braces, and hyphens.

Purpose of the Study:

In Pakistani educational institutes English is taught as a compulsory subject. Different are used to teach language skills. However, students still face difficulties in language learning. Nowadays, the importance of English language urges language educators and researchers to find new strategies to teach English in more effective way. Therefore, there is a need to make students aware of some interesting strategies that can help them to learn a language, as English is very crucial for getting information.

The purpose of this study is to investigate the relationship between the independent variable i.e., writing boredom and the dependent variable i.e., writing composition performance by deploying writing boredom coping strategies as a mediator in the Pakistani ESL context.

Research Objectives:

To determine the extent of the connection between writing boredom and writing composition performance.

To determine the extent of the connection between writing boredom and writing boredom coping strategies.

Research Questions:

What is the extent of relationship between writing boredom and writing composition performance?

What is the extent of relationship between writing boredom and writing boredom coping



strategies?

Theoretical Framework:

In 2006, Pekrun introduced the concept of control value theory, which proposes two main categories of attitudes in learners. Positive activating sentiments and negative activating sentiments. Positive activating sentiments include optimism, joy, and hopefulness whereas negative deactivating sentiments include boredom and pessimism that has a negative impact on learners' accomplishment. It has been explored that negative sentiments have a negative effect and influence on learners writing performance (Pekrun, 2006). The control value theory is applicable in this study in a way that how the negative and positive sentiments and emotions of the learners affect writing composition performance.

Moreover, Control value theory is a motivational theory that explains how the motivation and performance of individuals are influenced by the perception of control and the value that they attach to a particular task or activity. According to control value theory, individuals are more likely to be motivated and engage in a task when they perceive that they have control over the task and when they see it as valuable to them.

The theory proposes that individuals' motivation is determined by three primary factors: expectancy, control, and value. Expectancy refers to the belief that one's efforts will lead to successful performance, control concerns the belief that one can control the outcome of the task, and value relates to the perceived importance or relevance of a task. All three factors are interrelated and affect an individual's motivation and perceptions of a task.

The constructs of the control value theory have been supported by a range of empirical studies. For example, studies have found that students who perceive that they have control over their task are more motivated to learn and have better academic performance (Patrick, 2016; Volet & Järvelä, 2001). Furthermore, the motivational benefits of control and value perception have been observed across various settings, such as in sports (Goudas, Biddle, & Fox, 1994) and work environments (Liu, Zhao, & Li, 2019).

Control value theory is also applicable in the field of health psychology, where it has been used to understand the factors that influence health-related behaviors. Research has shown that individuals who perceive that they have control over their health behaviors are more likely to engage in healthy behaviors and have better health outcomes (Skinner, 1996; Williams, McGregor, Sharp, & Levesque, 2006).

Overall, control value theory provides a useful framework for understanding human motivation and can be applied across a range of contexts. By considering the role of control, expectancy, and value, researchers and practitioners can design interventions and strategies to enhance motivation and improve performance and outcomes.

Methodology:

This study follows the quantitative research approach. It is a fundamental plan that provides the guidelines for gathering data and analytical stages of the research work. In other words, it provides the framework outlining the categories of information to be acquired, their sources, and the method of data collection. A research design, according to (Kinnear & Taylor, 1996; Churchill & Iacobucci, 2005), is a road map that directs a researcher to complete the study and ensures that the investigation remains relevant. In this research, care has been taken to make sure that these ideas are present in the study design for this project. The numerous frameworks used in the research design can be categorized into two main groups: Exploratory and conclusion, the conclusion research is further broken down into descriptive and informal

research (Seth Ginsburg, 2011). Conclusion researches are filled with quantitative investigations looking for large amounts of data and usually using some kind of statistical analysis.

This chapter presents an explanation of research methods that were followed in the study to look into the relationship between the independent variable, dependent variable, and mediating variable. This section also describes the research tools that were utilized to collect the needed data and the procedures of data collection then it explains how the quantitative data was measured. It presents the entire research method that how the data was collected and analyzed. From a broader perspective, the current study employs a correlational research design containing the quantitative approach. Reliable and valid research tools were used to collect quantitative data as explained in the next sections. The research design of the current study is described in the following section

A quantitative research strategy was employed to collect the data. Furthermore, the link between the variables was also determined using a correlational methodology. Writing boredom coping strategies are used as a mediating variable in this study to define the association between writing boredom and writing composition performance. Figure 1 depicts the research's theoretical framework. Figure 1 illustrates how boredom, while writing serves as an independent variable. Moreover, writing boredom coping strategies is a mediating variable. Lastly, writing composition performance acts as a dependent variable in this study.

Research design

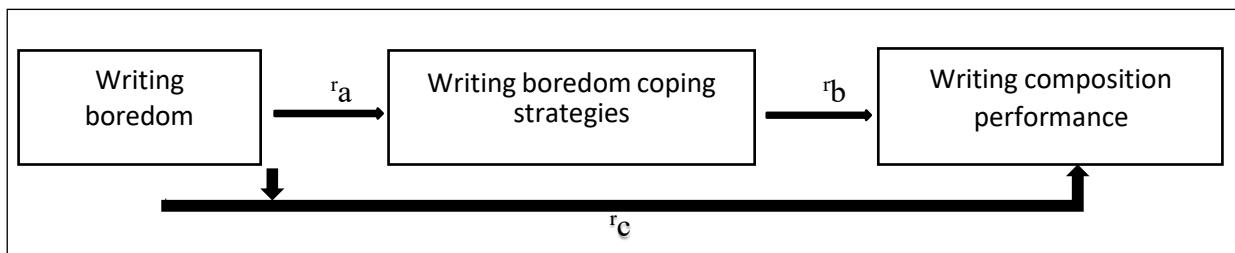


Figure 1

Note. r_a = The relationship between writing boredom and writing boredom coping strategies; r_b = The relationship between writing boredom coping strategies and writing composition performance; r_c = The relationship between writing boredom and writing composition performance.

The Fast-National University of Computer and Emerging Sciences (NUCES), Lahore, a private university in Pakistan, was the site of the correlational investigation. The university in Pakistan has five campuses and provides a range of undergraduate and graduate degrees. To be more precise, the current study was carried out on the campus of FAST in Lahore. Since that the researcher is also a student here, the primary motivation for conducting the quantitative study on this campus was to demonstrate how affordable and accessible organizational research is. All universities in Pakistan require their undergraduate students to take English as a subject. The undergraduate students, or ESL learners, at FAST-NUCES in Pakistan, were the primary focus of the current study. Details on the study's participants are provided in the following section.

Research Participants:

Participants in this study were undergraduate Pakistani ESL learners. English is taught as a mandatory subject at the undergraduate level in every university in Pakistan (Ahmed, 2018).



Although there were more than a few hundred thousand participants, the research's primary population may be assumed to be all undergraduate students at universities (Ahmed, 2018). The researcher used random sampling to select the participants. Therefore, the participants of this research were undergraduate students in the second semester of the school of computing at Fast-National University of computer and emerging sciences, Lahore, Pakistan. This school offers four programs i.e., BS (Computer Science), BS (Data Science), BS (Software Engineering), BS (Robotics). In addition, the participants were selected only from BS CS department due to time constraints. Furthermore, there are nine programs at the undergraduate level i.e., Bachelor of business administration), BS (Accounting & Finance), BS (Business Analytics), BS (Computer Science), BS (Civil Engineering), BS (Data Science), BS (Electrical Engineering), BS (Robotics), and BS (Software Engineering) offered by the mentioned university.

Students:

The students were selected randomly to investigate the relationship between variables as mentioned in this study. This study involved 200 students in total, 128 of whom were male and 72 of whom were female. The total population of the study was 401. According to Krejcie and Morgan (1970), a suitable sample size for this population should be 200. Random sampling was used to gather the required data, giving every participant an equal opportunity to take part in the study. Random sampling is a technique used in research to ensure that a sample of data is representative of the larger population from which it is drawn. It involves selecting participants or data points at random, in order to avoid potential biases that may affect the accuracy of the results. Random sampling is commonly used in quantitative research and can provide efficient and reliable results. One example of the use of random sampling in research is a study by Zhang et al. (2021) on the effect of parental involvement on children's academic achievement in China. The researchers used random sampling to select a representative sample of parents and children from different regions and socioeconomic backgrounds in China, ensuring that their findings would be generalizable to the wider population.

Another study by Hossain et al. (2020) investigated the prevalence of depression among undergraduate students in Bangladesh. The researchers used random sampling to select participants from different universities in the country, ensuring that their results would accurately reflect the prevalence of depression among the wider student population.

Overall, random sampling is an important technique in research that can help ensure the validity and reliability of the findings, making it an essential tool for researchers in a variety of fields.

Research Instruments

A significant step in the development and realization of any research is a clear understanding of a research design, as it provides the theoretical and methodological foundations of the study (Labaree, 2009). In this study, a quantitative research approach was employed to collect the data. Quantitative research is a technique for testing objective hypotheses since it examines the relationship between variables. These variables can be measured, frequently using instruments, to allow statistical analysis of numbered data. (Creswell et al., 2003). Moreover, quantitative procedures assert the scientific measurement and the statistical analysis of data collected by means of surveys and questionnaires or through manipulation of previously available data by employing computation techniques (Aliaga & Gunderson, 2002). In other words, the quantitative research method is an organized empirical probe of the noticeable phenomenon through mathematical statistical or mathematical techniques. Its data is any data that is present in numerical forms such as percentages and numerals. Moreover, its findings can be generalized to all populations the number of its sample is quite significant.



Moreover, the association between the variables was also determined using a correlational study approach. Writing boredom coping strategies are used in this study as a mediating variable to define the association between writing boredom, an independent variable, and writing composition performance, a dependent variable. Although you can test if your variables change simultaneously in correlational study design, you cannot be certain that one variable was the only factor that caused a change in another; rather, it just illustrates how the variables are associated.

A writing composition test and two questionnaires were among the three tools used in this study to collect data. More specifically, the "level of boredom scale" (refer to appendix A), which consists of seven sentences and a five-point Likert scale, was modified by Shehzad et al. (2021) to gather data on independent variables, i.e., writing boredom. Fornell and Lacker (1981) also state that the value of CR must be bigger than 0.7. The "Coping with boredom scale" (refer to appendix B) was also modified by Shehzad et al. (2021) to collect data regarding the mediating variable, i.e., writing boredom coping strategies. There are 20 items total, including a Likert scale with a five-point scale from one to five. The HTMT (Heterotrait Monotrait) values are less than the prescribed benchmark of 0.85 declared by Hensler et al. (2015).

Lastly, the performance of Pakistani ESL students was also evaluated using a writing composition test based on the International English Language Testing System (IELTS). Moreover, a writing rubric was adapted to convert the score of the writing composition test (refer to Table 1) below. The International English language testing system (IELTS) is frequently deployed as one of the criteria for granting admission to students in universities. The test included writing essays given on a specific topic. Furthermore, the questionnaire was adapted from two previous studies, the first one was, 'Do reading boredom and reading boredom coping strategies predict comprehension performance? An empirical investigation of Saudi EFL learners Shehzad et al. (2020). The other one was, 'listening boredom, listening boredom coping strategies, and listening performance. Exploring the possible relationship in the Saudi EFL context Shehzad et al. (2021). I changed the phrasing of a few items to better fit the language and context of the questionnaire, such as changing the word "listening" to "writing" in the questions.

Table 1

Writing rubric to determine the writing composition level (based on Brooks, 2013)

Writing composition test	scores on writing test	five-point Likert scale
Excellent	17-20	5
Good	13-16	4
Average	9-12	3
Below average	5-8	2
Poor	1-4	1

Correlational research design

Correlational research design is a type of research design used in social sciences to investigate the relationship between two or more variables. In this design, the researcher does not manipulate any variable but instead measures the strength and direction of the relationship between the variables to determine whether there is a correlation. Correlational research design is a non-experimental research design that helps to test the relationship between variables. Unlike an experimental design, this design does not manipulate or control variables but instead measures the relationship between them. Correlational research design is useful in explaining



complex relationships between variables where experimental manipulation is not feasible or ethical (Trochim & Donnelly, 2008). The advantage of correlational research design is that it helps to explore the relationship between variables that cannot be manipulated or controlled in experimental design. The limitations include the inability to infer causality, generalizability, and reliability of measurement (Salkind, 2010). Correlational research design is commonly used in social sciences to investigate the relationship between variables. For example, it can be used to investigate the relationship between depression and anxiety, political attitudes and behavior, or demographic variables and job satisfaction (Rosenthal & Rosnow, 2008).

Overall, the correlational research design is a useful research approach that helps to investigate the relationship between variables. It is important to note that correlation does not necessarily imply causation, and other research designs such as experimental design may be needed to establish causality.

Data collection procedures

The process of gathering data for this study took roughly four weeks (i.e., 22nd February 2023 to 22nd March 2023). The researcher asked the relevant class section's instructor for permission before collecting the data. The main purpose is to collect data at this university. i.e., Fast, was the cost-effectiveness and time constraints as the researcher is a student here. After getting permission from the class teacher, a sample size was selected. Subsequently, writing composition tests and questionnaires were administered. Moreover, it is worth mentioning here, that the goals of this study were explained to the subjects. They were also made aware that their identities would remain confidential. The questionnaires were examined again after data collection to find any unanswered questions. At last, the collected data finally proceeded for data analysis.

Data Analysis:

Data analysis is the process of systematically examining and interpreting data to extract meaningful insights and draw conclusions about a particular phenomenon or topic. It is an essential component of scientific research, business intelligence, and decision-making. Data analysis involves collecting, cleaning, and transforming data into a structured format, followed by applying statistical and analytical techniques to extract useful information. One example of data analysis is a study conducted by Alzahrani et al. (2020) on the impact of Internet banking on customer satisfaction in Saudi Arabia. The researchers collected data from a sample of participants using a questionnaire and conducted statistical analysis to determine the relationship between Internet banking and customer satisfaction. Another example is a study by Cheung and Wong (2020) on the effects of social media on mental health in Hong Kong. The researchers collected data from a sample of participants through online surveys and used statistical analysis techniques to examine the relationship between social media use and mental health outcomes. Overall, data analysis is a critical component of research and decision-making. It helps to identify patterns, trends, and relationships within data, thereby providing insights that can guide future action and policy.

To analyze the gathered data, the researcher used SPSS software. In more detail, analyzing internal consistency and reliability, validity and discriminant validity, as well as evaluating the dependability of each particular item, a measurement model was used. Moreover, the researcher used linear regression through SPSS for hypothesis testing and to determine the direct and indirect relationships between the research's listed variables. Linear regression is a statistical method used to estimate the relationship between a dependent variable and one or more



independent variables. The goal of linear regression is to find the best linear relationship between the dependent variable and the independent variables, which can then be used to make predictions

Results and discussion:

Reliability Analysis of Scales

Table 3

Cronbach alpha Coefficients of the Writing Boredom, Writing Boredom Coping Strategies, and Writing Comprehension Performance

Construct	Code	Items	α
Writing Boredom	WB	7	0.731
Writing Boredom Coping Strategies	WBCS	20	0.860
Writing Comprehension Performance	WCP	1	1

Note. α = Cronbach alpha Coefficients

Reliability assesses the stability and consistency of the measuring instrument under investigation. It was developed by Cronbach in 1951 (Atkinson, Bradburn, & Horvitz, 1995). Cronbach alpha is the reliability coefficient that indicates items are positively correlated with each other. It is a measure of depicting the internal consistency of the scale (Sekaran, 2003). The values of Cronbach's Alpha greater than .70 indicate good internal consistency of the scale and retention of items in the scale (Nunnally & Bernstein, 1994).

Table 3 mentions the details of Cronbach's Alpha Coefficient. In this study, the reliability of a scale assessing Writing Boredom, Writing Boredom Coping Strategies, and Writing Composition Performance was assessed. The results indicate that the scales have sufficient reliability. The Cronbach's alpha coefficient for Writing Boredom was 0.731, indicating a moderate to a high degree of internal consistency among the items measuring Writing Boredom. Similarly, Cronbach's alpha coefficient for Writing Boredom Coping Strategies was 0.860, indicating a high degree of internal consistency among the items measuring coping strategies for writing boredom. Since all the value for each construct is greater than the cutoff value of 0.7 hence making it a reliable measure. These findings suggest that the scales are reliable and can be used with confidence to measure the constructs in future research.

Visual Inspection

Visual inspection is a critical step in quality control, research, and manufacturing processes. It is a non-destructive testing method used to detect surface defects, burrs, scratches, discoloration, and other flaws in products and materials. Visual inspection is an affordable and versatile method used in many industries, including automotive, aviation, electronics, and pharmaceuticals.

In addition, visual assessment of the distribution might be utilized for inspecting Normality, despite the fact that this methodology is typically questionable and doesn't ensure that the distribution is normal. However, the reader can figure out the assumption of distribution by themselves, when the data is visually presented through a Q-Q plot, etc. (Ghasemi & Zahediasl.

2012). Furthermore, the Q-Q plot plots the quantiles (data is divided into equal portions) of the data set instead of each value present in the data set and provides easier interpretation for researchers. The Q-Q plot for Writing Boredom, Writing Boredom Coping Strategies, and Writing Comprehension Performance is mentioned below for visual inspection.

Q-Q plot for Writing Boredom

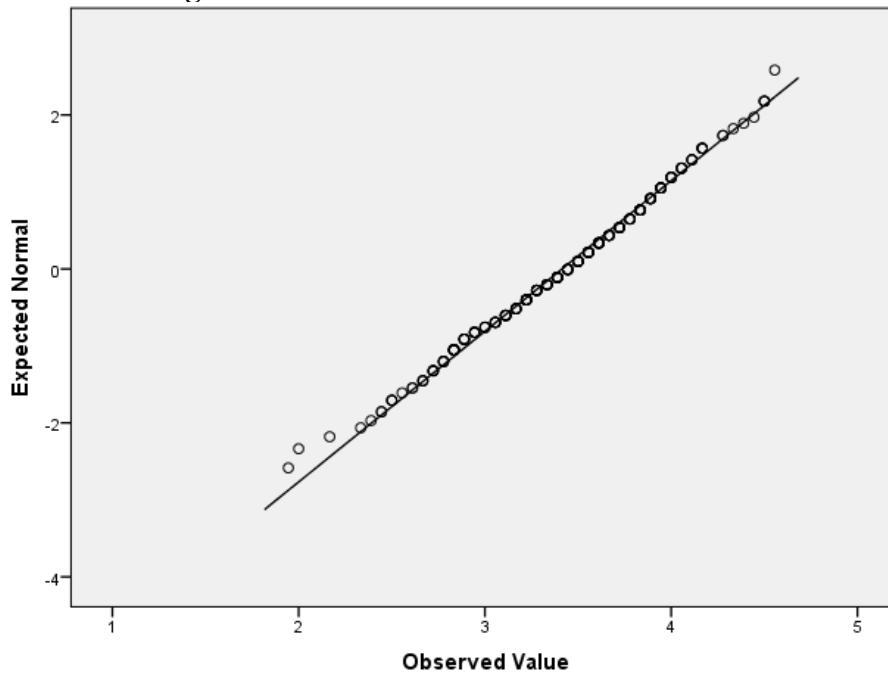


Fig 3: showing Q-Q plots for the Writing Boredom scale

Q-Q plot for Writing Boredom Coping Strategies

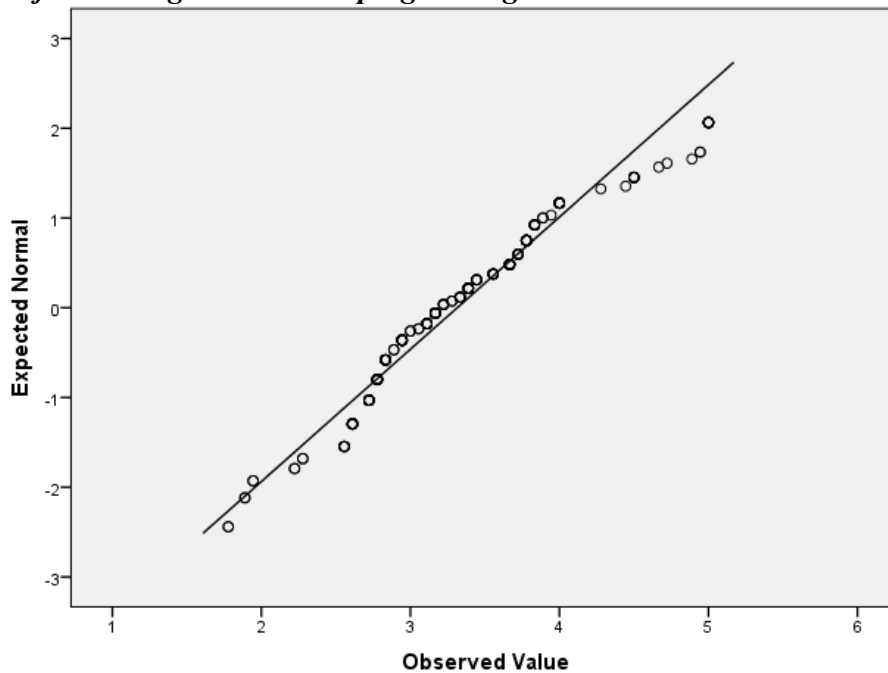


Fig 4: showing Q-Q plots for Writing Boredom Coping Strategies
Q-Q plot for Life Satisfaction

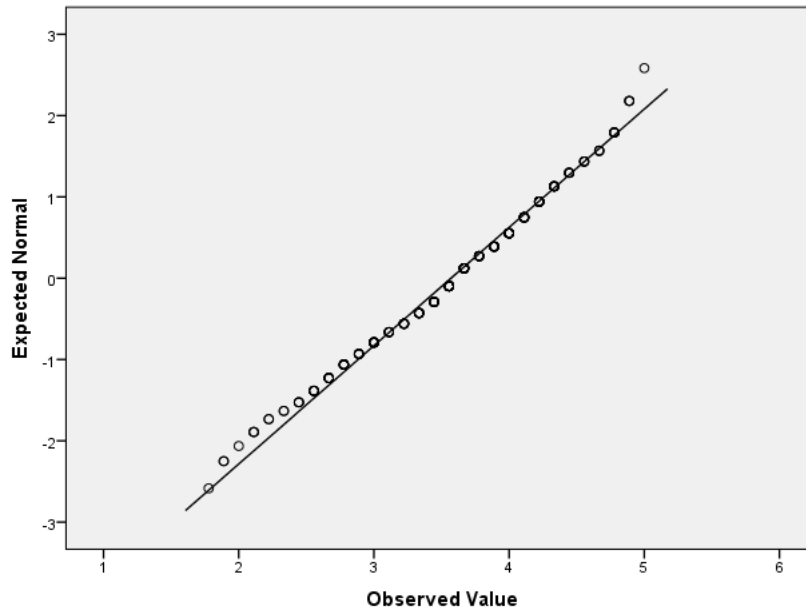


Fig 5: showing Q-Q plots for the Writing Comprehension Performance

a) Skewness and Kurtosis

Table 4

Means, Standard deviations, Skewness, and Kurtosis values of Writing Boredom, Writing Boredom Coping Strategies, and Writing Comprehension Performance

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Skewness</i>		<i>Kurtosis</i>	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error	Statistic
WB	200	1.935	0.691	0.172	0.054	0.342	-0.816
WBCS	200	1.570	0.560	0.172	0.049	0.342	-0.078
WCP	200	2.166	1.067	0.172	-0.274	0.342	-0.754

Note. WB = Writing Boredom, WBCS = Writing Boredom Coping Strategies, WCP = Writing Composition Performance.

A normal distribution specifies how closely all of the values in a data set are gathered around



the mean and if the values for Skewness and Kurtosis fall between the permissible range of -2 and +2 then it is considered that the data is normally distributed (George & Mallery, 2010; Khan, 2015). Since it is evident from Table 4 that the value of skewness for Writing Boredom, Writing Boredom Coping Strategies, and Writing Comprehension Performance is 0.054, 0.049, -0.274 respectively, and for Kurtosis its -0.816, -0.078, -0.754, which is within the range of -2 to +2 hence, it signifies that the data is normally distributed.

Confirmatory Factor Analysis

Confirmatory factor analysis (CFA) is a statistical method used to test a hypothesized structure or model of relationships between observed variables and underlying latent variables. It is commonly used in social sciences, marketing, and psychology to evaluate a theoretical model of a construct or to assess the validity and reliability of scales or instruments. Here are some references that explain the concept and use of confirmatory factor analysis.

1. Definition and Purpose of CFA: Confirmatory factor analysis is a multivariate statistical technique that tests the extent to which a pre-specified theoretical model matches the actual data. It is used to evaluate the construct validity of the data, examine the reliability of the measurement instrument, and identify the underlying latent variables that may explain the relationships between the variables (Brown, 2015).

2. Process of CFA: The process of CFA involves specifying a theoretical model, estimating the parameters of the model, evaluating the goodness-of-fit of the model, and making modifications to improve the fit if necessary. The model is typically evaluated using fit indices such as Chi-square, Root Mean Square Error of Approximation, Comparative Fit Index, and Standardized Root Mean Residual (Kline, 2015).

3. Applications of CFA: Confirmatory factor analysis is commonly used in social sciences, marketing, and psychology to assess the reliability and validity of scales or instruments, to evaluate a theoretical model of a construct, and to compare the fit of alternative models. It is used in a wide range of research studies, including satisfaction and loyalty measurement, organizational behavior, and marketing research (Henson, 2016).

Confirmatory factor analysis is a powerful statistical technique that is widely used to assess the validity and reliability of measurement instruments, evaluate theoretical models of constructs, and compare the fit of alternative models. The process of CFA involves specifying a model, estimating parameters, evaluating the goodness-of-fit, and making modifications to improve the fit if necessary. It is used in a wide range of research studies across different disciplines.

Table 5

Factor Loading score of Writing Boredom, Writing Boredom Coping Strategies, and Writing Comprehension Performance

Writing Boredom	Writing Boredom Coping Strategies	Writing Composition Performance
-----------------	-----------------------------------	---------------------------------



WB1	0.735
WB2	0.754
WB3	0.820
WB4	0.730
WB5	0.647
WB6	0.704
WB7	0.816
WBCS1	0.777
WBCS2	0.690
WBCS3	0.797
WBCS4	0.736
WBCS5	0.675
WBCS6	0.864
WBCS7	0.712
WBCS8	0.853
WBCS9	0.603
WBCS10	0.577
WBCS11	0.508
WBCS12	0.746
WBCS13	0.722
WBCS14	0.651
WBCS15	0.734



WBCS16	0.724	
WBCS17	0.566	
WBCS18	0.856	
WBCS19	0.685	
WBCS20	0.619	
WCP		1

In this study, factor loadings were computed for a latent variable using the administered items. All items demonstrated factor loadings above the designated cut-off value, indicating that they are reliable and valid indicators of the latent variable. These findings provide strong support for the construct validity of the measure used in this study. It can be concluded that the measure has good psychometric properties and can be used with confidence in future research.

Table 7

Discriminant Validity of the scales of Emotional Intelligence, and Self-Esteem of Employees of the public and private sector (N=200)

	Writing Boredom	Writing Boredom Coping Strategies	Comprehension Performance
Writing Boredom	0.746		
Writing Boredom Coping Strategies	0.557	0.711	
Writing Comprehension Performance	0.614	0.691	1

Hypothesis Testing

Linear regression

To test the hypotheses linear regression analysis was carried out. Linear regression is carried out to examine the predictive relationship between one independent variable with one dependent variable.

H₁: There is a substantial and negative relation between writing boredom and

Writing Composition Performance.



Figure 1: Writing Boredom and Writing Composition Performance.

To test the H1 linear regression analysis was carried out with the independent variable Writing Boredom and the dependent variable Writing Composition Performance.

Table 8

Showing Linear Regression Analysis of Writing Boredom and Writing Composition Performance

Variable	B	S.E	β	t	p-value
WB	-.743	.096	-.614	-7.731	.000***

*** $p < .001$

Note. WB= Writing Boredom

The results of the regression model showed that Writing Boredom is a significant negative predictor of Writing Composition Performance ($\beta = -.743$, S.E = .096, *** $p < .001$), the values of adjusted R^2 showed that independent variable writing boredom causes 37.7% of the variance in the dependent variable Writing Composition Performance. The results revealed that the higher the Writing Boredom lower the would-be Writing Composition Performance.

H₂: There is a substantial and positive relationship between Writing Boredom and Writing Boredom Coping Strategies.

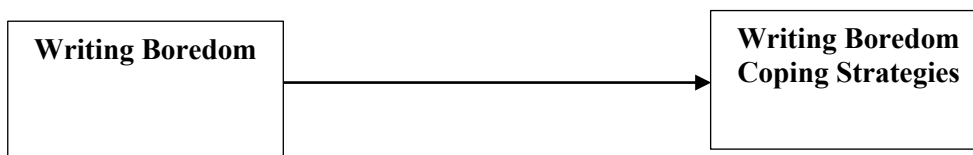


Figure 2: Writing Boredom and Writing Boredom Coping Strategies.

To test the H2 linear regression analysis was carried out with independent variable Writing Boredom and dependent variable *Writing Boredom Coping Strategies*.

Table 9

Showing Linear Regression Analysis of Writing Boredom and Writing Boredom Coping Strategies

Variable	B	S.E	β	t	p-value
----------	---	-----	---------	---	---------

WB	.629	.078	.557	5.266	.000***
----	------	------	------	-------	---------

*** $p < .001$

The results of the regression model showed that writing boredom is a significant positive predictor of writing boredom coping strategies ($\beta = .629$, S.E = .078, $**p < .001$), the values of adjusted R^2 showed that independent variable Writing Boredom causes 31% of variance in the dependent variable writing boredom coping strategies. The results revealed that higher the writing boredom higher would-be engagement in writing boredom coping strategies.

H3: There is a substantial and positive relation between Writing Boredom Coping Strategies and Writing Composition Performance.

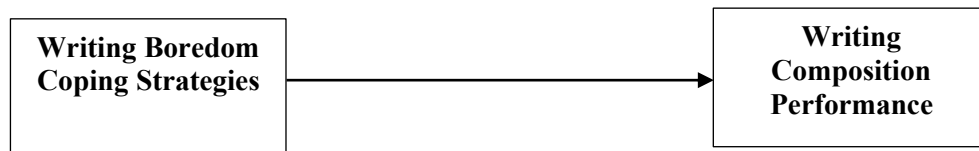


Figure 3: Writing Boredom Coping Strategies and Writing Composition Performance.

To test the H3 linear regression analysis was carried out with the independent variable Writing Boredom Coping Strategies and the dependent variable Writing Composition Performance

Table 10

Showing Linear Regression Analysis of Writing Boredom Coping Strategies at Writing Composition Performance

Variable	B	S.E	β	t	p -value
WBCS	.560	.130	.691	8.181	.000***

*** $p < .001$

Note. WBCS= Writing Boredom Coping Strategies

The results of the regression model showed that Writing Boredom Coping strategies is a significant positive predictor of Writing Composition Performance ($\beta = .560$, SE = .130, $**p < .001$) The values of adjusted R^2 showed that independent variable writing boredom coping strategies causes 47.7% of variance in the dependent variable writing composition performance. The results revealed that higher the Writing Boredom coping strategies higher would Writing Composition Performance.

After all the assumptions of mediation analysis are fulfilled, i.e., IV is significantly predicting DV, IV predicts mediator and mediator significantly predicts DV, mediation analysis using Hayes process was carried out.

Mediation Analysis

Following Hayes' (2013) Macro Process via bootstrapping method. a complete mediation

happens when a) IV significantly predicts DV (path c is significant) b) IV significantly predicts MV (path a is significant), c) MV significantly predicts DV, (path b is significant) and d) when mediator enters the IV-DV relationship, the total effect reduces significantly to non-significant. If the direct effect (path c) does not reduce significantly to non-significant, mediation only happens partially. In addition, the indirect effect for the mediational analysis has to be significant.

To consider a mediator has mediational effect when (1) the indirect effect (IE) of Writing Boredom (WB) on Writing Composition Performance (WCP) via Writing Boredom Coping Strategies (WBCS) (i.e., $IE = \text{path a} \times \text{path b}$; a = the effect of WB on the mediator WBCS, b = the effect of WBCS on the WCP) with 95% CI and 5000 bootstrap.

H4: Writing Boredom Coping Strategies mediate the relation between Writing Boredom and Writing Composition Performance.

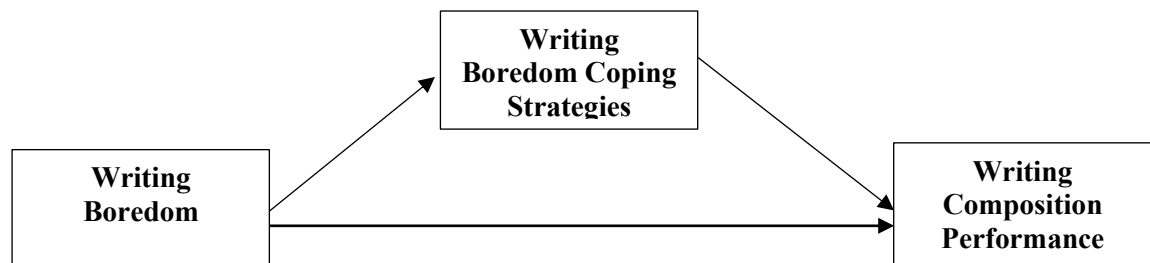


Figure 4: Writing Boredom, Writing Composition Performance and Writing Boredom Coping Strategies as Mediator.

Table 11

Mediation Analysis Model Summary of Writing Boredom, Writing Coping Strategies, and Writing Composition Performance

	Total Effect	Direct Effect	Indirect Effect	Confidence Interval		Conclusion
				Lower Bound	Upper Bound	
WB → WBCS → WCP	-.743 (.000)	-.751 (.000)	.352	.560	.821	Partial Mediation

Note. WB = Writing Boredom, WBCS= Writing Boredom Coping strategies, WCP= Writing Composition Performance

The study assessed the mediating role of Writing Boredom Coping strategies on the relationship between Writing Boredom and Writing Composition Performance. The results revealed a significant indirect effect of Writing Boredom on Writing Composition Performance ($B=.352, p < .001$). Furthermore, the direct effect of Writing Boredom on Writing Composition Performance in presence of the Mediator was also found to be significant ($B= -.751, p < .001$). Hence, Writing Boredom Coping strategies partially mediated the relationship between



Writing Boredom and Writing Composition Performance. Mediation analysis summary is mentioned in Table 11.

As previously noted, there were four main objectives for the current research. In light of the previously mentioned literature, four hypotheses have been developed. According to the research findings of the first research objective, Pakistani ESL students' writing boredom and writing composition performance are significantly and negatively correlated. As a result, the first hypothesis (i.e., H1) is confirmed. In simple words, research showed that Pakistani ESL students' writing composition performance is reduced when they become bored during English writing lessons. This result is consistent with previous research, much of which was done in the field of mathematics (Castens & Overbey, 2009; Cowan & Piegrass, 1997; Eren & Coskun, 2016 Pekrun et al., 2014; Putwain et al., 2018).

Moreover, to support earlier research, this conclusion is consistent with the control value theory, which contends that boredom is a negative deactivating emotion that negatively impacts students' academic performance (Pekrun, 2006).

Additionally, the results of the second research goal demonstrated a favorable positive and significant relationship between an independent variable (i.e., writing boredom) and mediating variable (i.e., writing boredom coping strategies). As a result, the second hypothesis (i.e., H2) is accepted. This result is in line with other earlier investigations (Nett et al., 2010; Eren & Coskun, 2016). A four-category theoretical framework of boredom coping strategies was developed by Nett et al. (2010), and it was suggested that it can be used in numerous disciplines in future research. The majority of researchers used this framework in the mathematics field; studies using this framework in other fields are few and far between. As suggested by Nett et al. (2010); the current study utilized this approach and carried out a study in the ESL writing domain.

Interestingly, the findings from the third research objective supported the third research hypothesis (i.e., H3) by showing a positive and substantial relationship between mediating variable (i.e., writing boredom coping strategies) and the dependent variable (i.e., writing composition performance). Moreover, in simple terms, the results showed that when learners used writing boredom coping strategies, their writing ability improved. This finding is consistent with those of earlier investigations (Nett et al., 2011; Eren & Coskun, 2016). According to Nett et al. (2011), using boredom coping strategies not only helps students get rid of their boredom but also helps students get rid of their motivation and emotions, both of which improve their performance.

Finally, the results from the fourth research objective demonstrated that writing boredom coping strategies mediated the association between the independent variable (i.e., writing boredom) and the dependent variable (i.e., writing composition performance). In addition, the fourth research hypothesis of this study (i.e., H4) is therefore supported. The results of this study are in contrast to those of Eren & Coskun (2016) but agree with Zhou and Kam (2017). A study by Eren & Coskun (2016) on Turkish students indicated that the relationship between math boredom and performance was not mediated by math boredom coping strategies. Moreover, a study by Zhou and Kam (2017) examined the connection between procrastination, achievement goals, self-efficacy, and boredom coping strategies on Chinese students which indicated that there is a relationship between procrastination, avoidance goals, and behavioral avoidance coping strategies.

Conclusion

The conclusions we came to get from this study may be useful to policymakers, students,



teachers, and syllabus designers of ESL writing, which ESL teachers can do to improve the writing proficiency of their students is to devise creative boredom coping strategies. Teachers can introduce different writing boredom coping strategies to improve the writing performances of the students. This will ensure optimum learning while keeping the lessons engaging. The attention-grabbing nature of the material that is to be presented to the students should be taken into consideration when designing a syllabus. As a result, the student's writing abilities would increase.

Even though, this study makes a significant contribution in many different ways, it does have some limitations. First, a quantitative research methodology was used. A quantitative or mixed-method approach might have produced more in-depth finding if it had been included in the study. Second, due to time restrictions, a correlational research design was adopted to gather data for the current study. However, utilizing a longitudinal design would have provided even more data gathered in a trustworthy manner over a number of time periods. Due to cost-effectiveness and time constraints, the researcher only gathered data from the university where she studied. At last, the findings of this research are generalizable to only university students, school or college students are not covered by the findings of the study. The current study makes a number of suggestions for prospective future research projects.

First by using the framework, used in the current study, researchers could carry out studies on the other major language skill such as listening. Second, as noted by Kruk and Zawodiak (2018), there is a dearth of studies on boredom that have been undertaken in ESL contexts; hence, future studies should concentrate on other ESL nations. Finally, data should be collected from ESL university students studying in both public and private institutes for future research.

References

Abdolrezaipoor, P. (2019). Applying computer-mediated active learning intervention to improve L2 listening comprehension. *Applied Research on English Language*, 8(4), 511-530. <https://doi.org/10.22108/ARE.2019.115355.1424>

Acee, T. W., Kim, H., Kim, H. J., Kim, J., Hsiang-Ning, R. C., Kim, M., & Wicker, F. W. (2010). Academic boredom in under- and overchallenging situations. *Contemporary Educational Psychology*, 35(1), 17-27. <https://doi.org/10.1016/j.cedpsych.2009.08.002>

Alhaison, E. (2017). Metacognitive listening strategies used by Saudi EFL medical students. *English Language Teaching*, 10(2), 114-122.

Al-Hebaishi, S. M. (2012). Investigating the relationships between learning styles, strategies and the academic performance of Saudi English majors. *International Interdisciplinary Journal of Education*, 1(1028), 1-11. <https://doi.org/10.12816/0002890>

Al-Qahtani, A. (2016). Why do Saudi EFL readers exhibit poor reading abilities. *English Language and Literature Studies*, 6(1), 1-15. <http://dx.doi.org/10.5539/ells.v6n1p1>

Alshumaimeri, Y. (2017). The effects of reading method on the comprehension performance of Saudi EFL students. *International Electronic Journal of Elementary Education*, 4(1), 185-195.

Baleghizadeh, S., & Rahimi, A. H. (2011). The relationship among listening performance,



metacognitive strategy use and motivation from a self-determination theory perspective. *Theory and Practice in Language Studies*, 1(1), 61-67. <https://doi.org/110.4304/tpls.1.1.61-67>

Bartlett, L. (2018). *Chronic Boredom Linked to Depression, Anxiety*. *Psychiatric News*, 53(19), 1-1

Brown, G., & Yule, G. (1983). *Teaching the spoken language*. Cambridge University Press.

Diederich, P. B. (1966). How to measure growth in writing ability. *The English Journal*, 55(4), 435-449.

Castens, A. R., & Overbey, G. A. (2009). ADHD, boredom, sleep disturbance, self-esteem, and academic achievement in college students. *Psi Chi Journal of Undergraduate Research*, 14(2), 52-58.

Conrad, P. (1997). It's boring: Notes on the meanings of boredom in everyday life. *Qualitative Sociology*, 20, 465-475. <https://doi.org/10.1023/A:1024747820595>

Cowan, M. M., & Piegrass, K. W. (1997). Attitudes about science among non-majors at the two-year campus of a liberal arts university (Report No. ED411034). Miami University.

Creswell, J. W. (2005). *Educational research: Planning, conducting, and evaluating quantitative and qualitative approaches to research* (2nd ed.). Merrill/Pearson Education.

Curran, P. J., West, S. G., & Finch, J. F. (1996). The robustness of test statistics to nonnormality and