

Relationship of ESL Pakistani Learners Learning Styles  
and Writing Strategies: A Correlative Study



*By*

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MS Thesis

In

English (Linguistics & Literature)

COMSATS University Islamabad,  
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**COMSATS University Islamabad,  
Lahore Campus**

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A Thesis Presented to

COMSATS University Islamabad, Lahore Campus

In partial fulfillment of the requirement for the degree of

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A Post Graduate Thesis submitted to the Department of English as partial fulfillment of the requirement for the award of Degree of MS English.

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## Declaration

I **Ashique Ali**, a bonafide student of MS English with Reg. No. **CIIT/FA21-REL-006/LHR** in COMSATS University Islamabad, Lahore Campus would like to declare that the dissertation entitled **Relationship of ESL Pakistani Learners Learning Styles and Writing Strategies: A Correlative Study** Submitted by me in partial fulfillment of the requirements for the award of the Degree of Master of Science in English is my original work. I have not taken any material from any source except referred to wherever due to that amount of plagiarism is within the acceptable range. If a violation of HEC rules on research has occurred in this thesis, I shall be liable to punishable action under the plagiarism rules of the HEC.

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It is certified that **Ashique Ali** with Registration No. **CIIT/FA21-REL-006/LHR** has carried out all the work related to this thesis under my supervision at the Department of Humanities, COMSATS University Islamabad, Lahore Campus, and the work fulfills the requirement for an award of MS degree.

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Dedicated to

*My parents and my siblings*

who encourage me to strive for the best at every stage in my life.

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With the grace of God Almighty who blessed me with the competence to attain knowledge, I then acknowledge all the individuals who contributed to helping me achieve this milestone.

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**Ashique Ali**

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## **ABSTRACT**

### **Relationship of ESL Pakistani Learners Learning Styles and Writing Strategies: A Correlative Study**

This study deals with the relationship of ESL learning styles and ESL writing strategies used by the ESL Pakistani University learners to learn and improve their method to gain new information (Felder & Brent, 2005). Through the random sampling 200 students studying ECC (English Comprehension and Composition) from the COMSATS University-Lahore Campus at undergraduate level were selected to collect data. A quantitative research design has been followed. To investigate the preferred learning styles Reid's (1984) questionnaire (PLSQ) has been used to know the highly and low adopted style. To know the writing strategies at before writing stage, when writing stage and revising stage Petric and Czarl's (2003) questionnaire has been used as a tool. Descriptive statistics like mean score and standard deviation has been done to know the use of learning styles and writing strategies at high and low. Furthermore, Pearson Correlation is used to know the correlation between learning styles and writing strategies. Findings show that the most preferred learning styles of COMSATS Lahore are visual and auditory. With respect to ESL writing strategies, they use writing strategies but at the revising stage they use the most. Moreover, there is significant correlation between learning styles and writing strategies as  $p < 0.05$ . The study is helpful in pedagogy as it helps the teacher to become familiar with students learning styles and syllabus designer can design syllabus according the preferred learning styles of the students. This study also recommends the future researchers investigate learning style in relation to other variables.

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# **CHAPTER 1**

## **INTRODUCTION**

This study deals with the relationship of ESL Pakistani Learners' Learning Styles and Writing Strategies. Learning styles can influence an individual's learning trend and attitude to improve their learning (Armstrong, Peterson, & Rayner, 2012, p. 451). Learning style is the preferred method of a person towards learning a new knowledge (Felder & Brent, 2005; Fleming, 2001). Claxton and Ralston (1978) explain learning styles as the consistent attitude to respond and get the inspiration in a learning context. ESL learners choose effective learning techniques to learn language according to their preferred learning style (Islam et al., 2018). According to Khatib (2013) ESL learners use various preferences of learning styles in the process of gathering, planning and developing awareness and information for the effective knowledge. Reid (1995) cited in the works of Khalil and Sabir (2019) to state that the ESL learners mostly use the visual style of learning, some others adopt aural or auditory way of learning and rest of them tend to use kinesthetic learning style or tactile. Reid was also of the view that individual or group learning also give far better results in ESL learning. Syakroni et al., (2019) stated that the new trends of teaching are to put emphasis on the learning styles. The ESL learners adopt the particular method to learn English as a second (Pudjaningsih, 2013; Chetty et al., 2019).

Every ESL student adopts his/her own learning style according to his/her own perception. Oxford (2003) argued that four characteristics of learning styles are considered on the basis of preference like auditory, visual, tactile and kinesthetic that is very strongly interconnected with learning of language. It is evident that every ESL learner perceives through his own preferred style (Alqunayeer & Zamir, 2015; Marcy, 2001; Peyman, 2014). Several researchers investigated the value of preferred styles of learning used by ESL learners like Al-Saud (2013); Kharb (2013); Peyman (2014) and Wen (2011).

Since the last three decades, learning styles have been investigated by many researchers like Atika, (2019); Parnrod et al., (2017); Wharton, (2000); Tabanlıoğlu, (2003); Oxford (1990); Oxford, (1995); Littlemore, (2001). Above mentioned researchers used the quantitative tool by with help of Oxford's (1990) questionnaire. The population of studies was school and college students. Ababneh (2015) investigated the learning styles on the priority of the student's learning style i.e., auditory, visual, kinesthetic, tactile, individual and group. Results of these studies are not authentic because some students did not follow any of them. Bidabadi and Yamat (2010) investigated the ESL learners' learning styles and found that the kinesthetic learning style was the most adopted style by the students. A set of questionnaires adopted from Willing (1988) was used. Pei-xin (2016) investigated the learning styles by using the questionnaires of Oxford (1990) and Reid's (1984). The results revealed that the tactile learning style is the most favorite style of the students. Roashani and Albina (2021) investigated the preferred learning styles of the students. Quantitative research tool was used to investigate the different learning styles of ESL learners. Oxford's (1990) questionnaire was used to know the different learning styles. Zakaria (2022) investigated the different learning styles of the learners on their communication strategies and the findings indicated that learners used their own preferred learning style but they adopted

the most one is visual learning style. Pakistani researchers Zakaria (2022); (Rana (2021) and Bhatti (2021) have used the quantitative research design but they all adopted the Oxford's (1990) questionnaire which used to analyze the learning styles with according to the strategies of memory, cognitive, metacognitive and social. So, there is dire need to conduct research by using Reid's (1984) questionnaire which explains the taxonomy of the learning style. This research explained the learning styles comparatively and individually to get the results more elaborately.

So far as the writing strategies are concerned, Oxford (1990) defines strategy is a systematic way, step and plan to learn some objective that is being used in educational contexts. Language learning strategy is characterized by Oxford (1990) and the main purpose of these strategies to make education environment more easy, effective and transferable. O'Malley and Chamot (1990) describes the LLSs are specific way of thinking and behavior to learn language. There has been a discussion on the topic that whether these LLSs are deliberate activities or behaviors (Cohen, 1998; Oxford, 1990; Stern, 1992; Wenden, 1987) or they may be out of one's conscious control (e.g., McDonough, 1999). Oxford (1990) divides LLSs into two broad categories i.e., Direct LLSs (compensation, memory, cognitive) and indirect LLSs (social, metacognitive and affective).

The use of ESL writing strategies by the students, affect the students' plans in writing process. (Bai, Hu & Gu, 2014; Chen, 2011; Gibriel, 2019). The researchers' attention towards the field of L2 writing, especially English, has increased due to a great boost in universities that use international languages as a means of instruction (Petrić & Czár, 2003). ESL writing strategies are of great importance while writing English texts as Abdullah (2009) is of the view that the success of an English writing task depends upon the kinds and frequency of the strategy usage. To be successful in writing, it is essential to use writing strategies because writing

strategies affect the product and process of writing (Angelova, 2000). Mu and Carrington (2007) investigated ESL writing strategies by using Victori's (1995) questionnaire and revealed affective strategies, metacognitive strategies, rhetorical strategies, and cognitive strategies while composing English texts. Maroof and Murat (2013) explored ESL writing strategies. The data was acquired from 50 students through the questionnaire developed by Petric and Czarl (2003).

In Pakistan, Haider (2012) carried out research to explore the writing strategies by using qualitative tool on only 5 respondents. Awan et al., (2021) investigated the writing strategies through writing survey test by adding only 40 students. These studies were done on the very small population and no proper questionnaire has been used. So, there is a need to investigate further study to get the comprehensive results by using the questionnaire of Petric & Czarl, (2003) and analyze the writing strategies at each stage like before writing stage, when writing stage and at revising stage.

### **1.1. Problem statement**

English as a second language is regarded necessary and very pivotal in academia, in social set up and also in the professional fields (Shamim, 2011; Zohaib et al., 2021). Ali (2014) argues that because of the high importance of English, it has become a necessary subject to be taught in all over Pakistan. The main reason to teach English as a subject in Pakistan is to enable ESL learners to have a full grip on English and to cope with current requirements using writing strategies is necessary. ESL learners adopt different ways to learn English language on the basis of their own conscious or unconscious efforts to enable their learning while dealing with English language (Bhatti et al, 2021). The problems related to language learning in Pakistan are lack of language learning aids, the trend of rote learning, untrained English language instructors who do not consider the learning behavior of the ESL learners (Khan & Iqbal, 2013). According to

Sajjad (2009) the modern ways of teaching differ from classical and conventional method of teaching because modern method involves activities in ELT classrooms. The proper usage of activities which are beneficial and supportive to the ESL learners is very affective according to the perception of their various learning styles. Akram & Mahmood (2007) explored that even syllabus developers do not bring the students' learning strategies and styles under the focus when they design syllabus. Apart from this, old and classical techniques and methods are commonly observed that create issues for Pakistani EFL learners. Warsi (2004) studied that in many institutes, teachers use grammar translation method (GTM) that is outdated but the language learning styles and strategies have never been taken into account. Anum (2014) suggests that due to the explicit variation in target language, Pakistani students confront problems in using writing strategies.

Not having a specific focus on learning style and writing strategies may affect learners' capabilities in learning and writing a language. So, there is a need to investigate the learning styles of ESL learners and their writing strategies in the context of Pakistani university students to facilitate them in their learning language and using of writing strategies.

## **1.2. Objectives of the Study**

1. To investigate the ESL learners' writing strategies - before writing, during writing and after writing stages.
2. To identify different learning styles of ESL Pakistani university learners.
3. To find the correlation of writing strategies and different learning styles ESL Pakistani university learners.



### **1.3. Research Questions**

1. What are the preferred learning styles of ESL Pakistani university learners?
2. Which writing strategies ESL Pakistani university learners utilized more frequently at before writing, during writing and after writing stages?
3. Is there any significant relationship between two variables – learning styles and writing strategies of ESL Pakistani learners?

### **1.4. Hypothesis**

1. Pakistani ESL learners adopt preferred modality of learning style
2. ESL Pakistani University learners use ESL writing strategies like planning, when writing and when revising strategies.
3. There is a significant relationship between ESL learners' learning styles and the writing strategies.

### **1.5. Significance of the Study**

This study will help the English language teachers in terms of reformulating their teaching methodologies in ELT classrooms to get significant output from their students. They will be able to do so when they will become familiar with the learning style and writing strategies of learners. The research will help the syllabus designers to include certain activities into the syllabus of students according to their learning style and writing strategies. This research work will help the curriculum and syllabus designers to cooperate with teacher to provide the material according to the requirement of students. Curriculum developer will design appropriate

activities, better programs and suitable materials to develop a more convenient learning environment in the classroom.

## **1.6. Delimitations of the Study**

This describes the correlation of ESL learning styles and ESL writing strategies utilized by the ESL learners of Pakistani University COMSATS –Lahore Campus. This research has been conducted in a specific setting. The researcher has restricted the scope of the research to investigate the relationship between ESL learning styles and ESL writing strategies adopted by the university students only. The researcher has delimited the scope of the research only to the students of this university. Furthermore, the required data has been collected only from the undergraduates who were studying the module of English Comprehension and Composition (ECC) in different departments of COMSATS University Islamabad, Lahore campus. Data has not been collected from other undergraduates studying any other module of English in any other semester. This is because the ESL learners at undergraduate level adopt different learning styles and writing strategies in the process of learning and writing text. Moreover, module of ECC emphasizes the writing skill of the ESL learners.

## **1.7. Definitions of the Key Terms**

**Learning Styles:** Learning style is the technique of a person to learn new thing based on his personality, habit, and preference. Through learning style, he stores his knowledge in his mind. He processes and retains the new ideas, information and set of techniques (Reid, 1995).

**Visual learners:** Visual learners tend to perceive by the use of visual instructions. Visual learners require some type of pictorial aids, some stimulus based on bulletin, films or videos (Oxford, 1995).

**Auditory learners:** Auditory learners are who learn new information with help of some audio lectures. They are interested in some source of oral- aural. So, they tend to discuss things and do conversation in form of groups. Such students actually need some kind oral instructions (Oxford, 1995).

**Kinesthetic learners:** Kinesthetic learners favour “total physical involvement with a learning environment such as taking a field trip, dramatizing, pantomiming, or interviewing” (Kinsella, 1995, p. 172).

**Tactile learners:** Tactile learners’ favour “learning with their hands through manipulation of resources, such as writing, drawing, building a model, or conducting a lab experiment” (Kinsella, 1995, p. 172).

**Individual learners:** An individual learner is someone who “learns more effectively through working alone” (Reid, 1995)

**Group learners:** A group learner is the one who “learns more effectively through working with others” (Reid, 1995).

**Writing process** is defined as a method of analyzing what learners think and do while composing a text rather than concentrating on the learners’ finished written product (Raimes, 1991).

Oxford (1990) defines the word “**Strategy**” as “a plan, step, or conscious action toward achievement of an objective”.

**Language Learning Strategy (LLS)** is any specific action taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations.

**Writing strategies** are the steps or behaviors that a writer uses deliberately to make the writing process more accurate. Actually, writing strategies are the writing techniques of writing (Petric & Czarl, 2003).

## **1.8. Organisation of Thesis**

The overall structure of thesis is as follows:

Chapter1 provides the background and context of this study. It showcases the problem statement and highlights the research gap by discussing the related past researches in Pakistani context. It also presents the intended research objectives and the formulated research questions. It also discusses research significance along with its delimitations.

Chapter 2 features an empirical and theoretical structure for the study by analyzing the current available literature related to the area. An attempt has been made to survey a variety of theoretical explanations on the basic concepts.

Chapter 3 highlights the research methodology of the present study and gives a detailed description of research strategies, research design, research tools, characteristics of the participants, procedures for data collection, data normality, and data reliability.

Chapters 4 analyses the data collected through the questionnaires. The researcher used SPSS that is computerized statistical software to analyze the collected data.

Chapter 5 presents the results of the statistical analysis done in chapter (4). These results have been discussed the research questions corresponding to the aims of the conducted study.

Chapter 6 summarizes the research findings, gives conclusions, and suggests implications based on the findings. Suggestions for future researchers have also been incorporated on the basis of the limitations of the present study.

# CHAPTER 2

## LITERATURE REVIEW

### 2.1 Introduction

The current chapter takes theoretical overview of framework used in the present study with help of related empirical studies on ESL learners' learning styles and writing strategies. ESL learners adopt their own preferred learning styles to learn new ideas (Alqunayeer & Zamir, 2015; Marcy, 2001; Peyman et al., 2014). According to the investigation of Oxford (2003) there are four layers of learning styles that are deeply close to ESL learning. With respect to the sense of preference, the learning styles are auditory, tactile, visual and kinesthetic. On the basis of personality characteristics, there are extraverted and introverted, thinking and feeling, randomly intuitive and of sensing- sequential, open vs. closure oriented, thinking vs. feeling and judging vs. perceiving. With respect to general degree of desire, learning styles are global, analytic and holistic and on the grounds of biological variation learning styles are different i.e., location, biorhythmic and nourishment of the learners (Nikoopour & Khoshroudi, 2021).

### 2.2. Studies covering Learners' Learning Styles

Researchers have investigated the ESL preferred learning styles and its relationship with other several variables especially with language learning strategies, age and gender (Pongsukvajchakul, 2021; Atika and Feng, 2019; Parnrod et al., 2017; Al-Hebaishi, 2012; Mulalic, 2009; Aqeel and Mahmoud, 2006; Ehrman and Oxford 1990; Ehrman and Oxford 1995; Wharton, 2000; Tabanlıoğlu, 2003; Oxford, 1995; Littlemore, 2001).

Gregersen and MacIntyre (2014, as cited in Dornyei & Ryan, 2015) explored that there should be principles which should be effective in the practical classroom based on the learning

styles of ESL learners and learners should have the awareness about their preferred learning styles in learning L2. So, with the help of balanced and analogical approaches students can balance their learning styles. Gregersen and MacIntyre (2014) suggested that students can resolve the learning style issues by using their preferred learning styles in learning English as a second language. According to Keefe (2001) learning style is combination of different factors like cognitive, affective and more of psychological aspects. They play their role as effective indicators to see the perception, interaction and response of ESL learners in a particular setting. It is cognitive ability and understanding to achieve target goal in a learning domain. Kho (2018) explored that kinesthetic way of learning is recorded as effective to the ESL learners as it is calculated highest in mean score (M=20.34). In the same way, Mohammad and Rashid (2013) investigated that ESL students tend to adopt kinesthetic learning style because the findings showed that 42% learners' learning styles was kinesthetic. Huang, Ka & Teo (2018) investigated the most preferred learning styles of ESL learners and they found that the students in Chinese University students prefer to adopt kinesthetic, visual and auditory styles to learn English as second language. Benitez-Correa et al., (2022) investigated that learning styles of ESL learners like visual, auditory, reading and writing, and kinesthetic are the very factors that affect the writing strategies. Srijongjai (2011) explored that learning styles (visual, auditory, reading and writing, and kinesthetic) have the correlation with writing strategies in L2 (English). He concluded that learning styles play an important role to the perception of writing strategies of ESL learners.

As Ajideh (2018) investigated the ESL learners' preferred learning styles by using Reid's (1994) PLSPQ questionnaire. The results of the study showed that arts students tend to adopt visual, kinesthetic, tactile and auditory learning styles while science students are mostly in

favor of kinesthetic way of learning. Sabarun et al., (2020) explored that learning styles of ESL learners that affect the perception of the learners and concluded that the learning style is the very factor that is directly proportion to learners' ability to learn language among many others factors which affect learning.

Tazik and Aliakbari (2018) investigated ESL learners' learning styles and the visual learning style was the most preferred style of undergraduate students. The students who picked the visual learning style perceived better as compare to students who adopted the other preferred ones. Same findings have been concluded in another study in Iranian context at Islamic Azad University (Khojasteh and Pishkar, 2015). Najarkolai, Beigzadeh, Motlagh, and Sabzevari (2015) explored the learning styles of the postgraduate students of Kerman University of medical Sciences and reached at the conclusion that most towering perceptual learning style of postgraduate students is tactile learning style (conceptual and experimental). Shah, Ahmed, Shenoy, and Srikant (2013) investigated the ESL learners' learning styles and found multiple preference of learning styles (auditory (hearing), visual, tactile, kinesthetic group and individual) and the ESL learners are inclined to use the kinesthetic style of learning. Naserieh and Sarab (2013) investigated the perceptual styles of the graduate students through Reid's model (1995) PSLQ (Perceptual Learning Style Query). The results showed that the students used the kinesthetic learning styles and tactile modals to learn language and more importantly they prefer to group based learning style. Peacock (2001) investigated the learning styles of ESL learners by using Reid's (1987) hypothesis and found students are inclined to use the kinesthetic and auditory learning in other case lack of correspondence with learning styles the ESL learners lead to misperception and confusion. Derakhshan and Shakki, 2018; Khojasteh and Pishkar, 2015) investigated that ESL learners are more associated to tactile as well as kinesthetic learning style



as oppose to individual, visual, group and auditory whereas the learners who are weak in learning language are of favor of visual and group study. Aqeel and Mahmoud (2006) explored the learning styles of ESL learners in Najah University. They found there was significant difference in the learning styles of ESL learners because of the use of computers in the class rooms. Kanninen (2009) argued that learning styles are much valuable. Kanninen concluded that learning atmosphere should be according to the learning style of the learners. It is very effective to know the learning styles of the students. The ESL learning should be according to preferred learning styles of the students.

Zhenhui (2000) investigated that in the process of academic learning, there are students with different types of learning styles no matter what type of the subject matter is there. To cope with the learning styles of the students should be given some activities according to their learning style. This will be very helpful for the students to learn according to their learning styles. In this way the students will be more successful and enjoy the learning. Rao (2002) found that students learning styles make them active learners. He experimented on 30 Chinese University students who were taking part in communication activities in learning English as a Foreign Language course. He found the students' traditional learning styles were restricted by the teachers' methods and they were not actively involved in learning and communicative activities. They were teacher-dominated and book-centered and they were forced for the rote study. So, some of the students suggested that teachers should change their style of teaching according to the learning style of the students of kindergarten. Kara (2009) explored the learning styles of ESL learners according to the teaching styles of their teachers. He interviewed 100 ESL leaners who were studying Anadolu University, Turkey in the Department of ELT. The aim of this study was to explore the potential results according to the learning styles (auditory, visual,

tactile, kinesthetic group and individual). The researcher founded that both students are of the favor of two learning styles: the visual and the auditory learning style. It was found that teachers did not consider the learning style of their students. So, the students were not satisfied and were confused when their teachers did not accommodate according to their learning styles.

Juris (2009) explored the learning styles of ESL learners. He interviewed the 254 students and 9 teachers to see the learning styles of the students. The research was embedded in both public and private sectors in Cordoba, Sucre, Atlántico, Bolivar and Colombia. The results showed that kinesthetic style was the dominated one and tactile and auditory were of secondary importance respectively. Mulalic (2009) investigated the issues and hindrances faced by the ESL learners in Malaysia regarding the perceptual learning styles. For the investigation of ESL learners' learning styles, the researcher formulated a questionnaire based on following learning styles: visual, auditory, tactile and kinesthetic. Kinesthetic learning style got the prevalent importance in this research. It was found that auditory and kinesthetic learning styles bear a great significant difference with respect to male and female. Auditory and kinesthetic learning styles where the most favored style by the male students as compared the female students. According to various ethnic grounds there was a significant difference in the students. Indian students were in the favor of visual learning style, Chinese and Malay students were found concerned with kinesthetic learning style. Garland and Martin (2005) explored the various perceptual learning styles of university students through online and directly taught courses. This study focuses on the learning styles of students according to their perceptual learning styles (auditory (hearing), visual, tactile, kinesthetic group and individual). Ramayah (2009) investigated those perceptual learning styles of Malay students. 199 females and 207 male participants were taken as the participants. It was found that the aural and visual learning styles were dominated ones. On the

other side, there was no student found adopting kinesthetic learning style. It was concluded that the female students are more inclined to aural and visual type of learning than that of male students. Fleming (2010) conducted longitudinal research in which he explored that there was no dominant learning style on the part of university students who were learning nursing at university of Irish. The first-year students were interested to adopt the dual aural and visual learning styles while on contrary some first-year students had no specific learning style. They rather use different styles of learning. The findings showed that the academic level of the students affect the learning styles.

Reid (1987) explored the learning styles of the students according their cognitive abilities on the native students and on the non-native speakers of ESL learners for the purpose of their perception in learning language process. He concluded through the analytical statistics that the learning styles of native speakers were completely different from those of non-native learners. It was also found that ESL learners having various learning and cultural backgrounds and there is much different from each other in their learning language preferences.

The preferred learning styles of the ESL learners differ from culture to culture and context to context (Reid, 1987). Many researches have been conducted on the usage of ESL learning styles on the basis of students' preference in various context and cultures but there are very few studies which had been done in Pakistani context (Fahim et al., 2021; Rana et al.,2021; Bhatti et al.,2021; Soomro et al., 2021; Hussain, 2018). These researchers used quantitative research design by using the Oxford's (1990) survey questionnaire. (Rana et al., 2021 and Bhatti et al., 2021) explored the learning style according to learning strategy like memory, cognitive, metacognitive, social and affective. Fahim et al., (2021) used quantitative research design by using the VARK (Visual, auditory, reading/ writing and kinesthetic) model to explore the

learning styles. But the results of these studies are mixed so there was a dire need to do further research to explore the learning styles of the students. In this study, quantitative research design has been used by adapting Reid's (1984) PLSPQ questionnaire to investigate the learning styles of ESL learners in Pakistani context.

### **2.3. Previous Studies on ESL Writing Strategies**

According to Oxford (1990) the word Strategy means "a plan, step, or conscious action towards achievement of an objective" that is being used in educational contexts as "Learning Strategies" (p.7). Language Learning strategy (LLS henceforth) is characterized by Oxford (1990) as "any specific action taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations" (p.8). According to O'Malley and Chamot (1990) LLSs are "the particular thoughts or behaviors" that assist in the process of language learning. There has been a discussion on the topic that whether these LLSs are deliberate activities or behaviors (e.g. Cohen, 1998; Oxford, 1990; Stern, 1992; Wenden, 1987) or they may be out of one's conscious control (e.g. McDonough, 1999). Oxford (1990) divides LLSs into two broad categories i.e. Direct LLSs (compensation, memory, cognitive) and indirect LLSs (social, metacognitive and affective). According to Oxford (1990), LLSs are employed while adopting process approach that emphasizes the outcome of language learning along with the examination of the techniques that learners employ during the learning process.

Kroll (2003) defines L2 writing or composition as "a unique area that has ties to but does not completely overlap with the fields of first language writing instruction" (p. 11). Research into second language writing process got attention of many researchers since the early 1980s (e.g.

Arndt, 1987; Krapels, 1990; Mu & Carrington, 2007; Raimes, 1987; Zamel, 1983). Early researches about the process of second language writing were influenced by research in L1 writing (Cumming, 1990; Hedgcock, 2005; Petric & Czarl, 2003; Silva, 1993). Specifically, it has been influenced by product, process and post-process writing theories and approaches (Abas& Aziz, 2016; Mohite, 2014; Petric & Czarl, 2003).

Krapels (1990) surveyed empirical researches on L2 writing and concluded: 1) Composing proficiency has relatively bigger role in bad performance of L2 writing as compared to linguistic competence. 2) Similarities exist among the writing processes of L1 and L2. 3) Learners apply their L1 writing strategies in L2 writing. 4) Application of writers' L1 in the composition of L2 helps in various ways.

Similarly, Zamel (1983) is also of the view that writers of L2 compose in the same way that is used by their L1 counterparts. However, Raimes (1987) and Arndt (1987) examined that learners employed different processes to write in their L1 and L2. Mu & Carrington (2007) are also of the view that L2 writing is completely distinct from L1 writing and teachers should specifically teach L2 writing to learners.

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Research about L2 writing strategies began since the early 1980s (e.g. Arndt, 1987; Krapels, 1990; Mu & Carrington, 2007; Raimes, 1987; Zamel, 1983). There has been a thorough research to explore other L2 areas but research to explore L2 writing strategies started quite late (Petric & Czarl, 2003). Writing strategies are considered important among the factors that affect the product and process of writing (Angelova, 2000). Researchers have worked on exploring ESL writing strategy usage and its correlation with several phenomena particularly with writing achievement or performance. The use of ESL writing strategies has good impact on students' ESL writing performance (e.g., Bai, Hu & Gu, 2014; Chen, 2011; Gibriel, 2019). Some researchers explored the differences in low and high proficient ESL learners regarding the usage of ESL writing strategies (Abdullah, 2009; Maarof & Murat, 2013; Mohite, 2014; Xiao, 2016; Yang, 2002). Good students use more planning, focusing and revising ESL writing strategies than bad students (Yang, 2002). It was proved by investigating ESL writing strategy usage of Chinese learners. For this investigation, Yang used questionnaire and think-aloud protocols to collect data.

Raofi's et al. (2014) conducted a study on L2 writing strategies to check the writing performance of ESL learners in the context of Malaysia. The findings of the study concluded that writing strategies used by the ESL learners can help the learners to improve their writing. It is depended on the learners how they choose and apply the writing strategies in the writing process.

Plakans and Yang (2012) identified the impact of writing strategies by conducting a study on the task of the integration of writing. The results of the study indicated that the 61 ESL learners performed well in the given task of writing when they attentively learned the writing strategies and applied them in their writing. So, writing strategies are the key points which are used by the ESL learners. Mastaan, Maroof & Embi (2017) investigated the application of writing strategies on the Malaysian ESL learners to check their writing performance at intermediate level. This study is based on the experiment. WS 71 Awan VFAST Transactions proposed by the Education and Social Sciences 09-3 (2021) et al was applied on the experimental group. The design of the study was experiment based on the instructions of cognitive and meta-cognitive writing strategies for the results. The results of this research indicated that writing strategies positively leave a good or bad effect on the writing of ESL learners.

Mu and Carrington (2007) investigated ESL writing strategies and the data was collected from three post-graduate students from China. This was done by employing a semi-structured interview, questionnaire in accordance with Victori's (1995) research, discussion sessions, and the participants' written output. The outcome revealed that the respondents employed affective strategies, metacognitive strategies, rhetorical strategies, and cognitive strategies while composing English texts.

Lim et al. (2011) conducted a study focusing on the writing strategies of undergraduate Engineering ESL learners in Malaysia used in their writing. The results of the study explored the writing strategies used by two groups-good and weak ESL learners when they adopted specifically cognitive strategies commonly to for the production of their essays. They also used the metacognitive as well as social strategies to generate the new ideas and to search out the correction of their written texts and expressions. They used the writing strategies in



comparatively and the recursive way was an adopted to gain the required results in the process of writing. The findings of the study showed the writing strategies used by the two groups of ESL learners (good and weak) and how they used them as well as the logic of using the writing strategies. It was also found that how the ESL learners utilized the strategies to overcome on the problems related to their writing.

Penuelaz (2012) carried out a study out by using the qualitative research design to explore the writing strategies regulated by the ESL learners. In this study, it was investigated how the factor has been found out which influenced the writing strategies of the students. Different writing strategies have been used by the advanced and weak learners but the advanced students preferred to adopt the strategies of cognitive, meta- cognitive and strategies of compensation. These strategies are followed by the strategies of affective, memory and social strategies. In the findings, correlation between frequencies of strategies has been calculated. The means of 187 participants through ANOVA explored the results that good learners gained the more grades than the weak ones by use of writing strategies.

Sadi and Othman (2012) investigated the writing strategies used by the ESL Undergraduate students in the Iranian context. The findings of this research showed that in spite of the usage of the writing strategies in the combination manner and recursion, the learners of the both groups are found to be different in their use of strategies like planning, drafting and reviewing of their writing. Through their recursive manners, proficient and poor student were observed different in their writing strategies. Mastan et al (2017) investigated the writing strategies in a study by means of two research aims. First aim of study was to explore the different kinds of writing strategies used by the ESL learners at intermediate level to check the proficiency of the students and the other aim of the study was to find out how the ESL writer's

writing is affected by the instruction of writing strategies. The findings of the study proved that the group which was instructed with writing strategies performed best than that of control group. The scores of treatment group performed well in the pretest and posttest. Writing strategies

According to Chamot (2005b) writing is much technical and tough task for the ESL and EFL learners who have to write something for the purpose of competence of communication. Some language writers who are very successful and expert in writing make their plans to organize their content of writing, try to use some writing strategies in a way to explain the contextual meaning, make the evaluation and refinement of their ways of writing according lexical choice and syntactic strategies and organize their writing process thoroughly (Bloom, 2008; Hedgcock, 2005; Manchón, Roca de Larios, & Murphy, 2007). A large number of researches have been conducted to check the positivity and everlasting effect of writing strategy instructions and these strategy instructions determine how ESL learners plan to go through the writing process, how much confident and autonomy they gain by using the writing strategies and furthermore, what type of accuracy and quality of write up is produced (Aziz, 1995; Cresswell, 2000; Macaro, 2001; Sasaki, 2004; Silva & Brice, 2004). Macaro (2001) explored the effect of the instructions through the writing strategy. He conducted his study on the students of secondary school on the six classes. It was an experimental type of study for five months of period in England and the classes were on the French language. The medium of instructions involved different types of writing strategies like meta-cognitive strategies for the advance preparation of the students. It also included the monitor and evaluation type of strategies. The tools of data collection were pretests and posttests along with the interviews, writing tasks, questionnaires and think aloud activities on the language of French writing process. The results showed through this experiment the students learnt significant achievements e.g., the accuracy of

grammar in their writing. In short, the results at the final level proved that through this experiment the writing approach of the students have been changed. It reported that they do not rely on their teacher in the process of writing; they became more careful when they use dictionaries. They use fewer dictionaries and carefully write their writing tasks. The strategies on cognitive and memory in the writing tasks brought up 44% of variation in the composition grade of the participants when they use the strategy instructions in their writing process (118 Olivares-Cuhat, 2002). The cognitive strategies were given much importance to develop the proficiency of the students in their writing tasks (Aziz, 1995). O'Malley & Chamot (1990) investigated that the ESL learners are more outperformed who adopt the strategies of cognitive and metacognitive in their second language writing than those who only use cognitive strategy of writing in their writing process. So, the results claimed that the ESL learners who have a strong command on large number of strategies are more vigilant and successful in their writing process.

Joe (2002) explored the importance of the writing strategies in an experimental study which was conducted on the Taiwan students to solve the issues of the incoherency in the writing tasks of the students. After getting written a composition by the students, they were interviewed about their writing strategies in the parts of the composition where there is no coherence in their writing. Through the interviews, there were three main reasons came to know on the basis of their response. Firstly, the participants were failed to use the strategies even though they had a full command on the writing strategies to handle the difficulties in the writing tasks. Secondly, some participants were lack of knowledge of the strategies and they didn't know variety of writing strategies when they started using in the process of writing. The last and finally they were given a very short amount of time to write up their tasks. The participants felt that the time was not sufficient for the proof reading and to monitor the strategies of writing and so they did

not write their composition accordingly. The results showed that the participants did not have a proper knowledge of using the metacognitive strategies of writing to plan their write up such as before writing strategies like organizing the writing process before starting, use of monitor the writing stage like lack of information when -writing strategies and during writing strategies and lastly the process of evaluation of their composition like how to assess the effectiveness of the writing strategies when they sue them according to their goals of writing process. So, the strategies for the writing process are very effective for the ESL learners to write their ideas. Baker and Boonkit (2004) explored the strategies of reading and writing through the modified version of SILL. There were 149 undergraduate students of 2nd year who were studying at a university of Thailand. Apart from them there was a small group of participants whom were interviewed related to their response through questionnaire and some of them were suggested to the completion of their learning a language journal. In so far as the use of writing strategies, 119 participants who were using previous knowledge and also used the dictionaries to handle their writing process at the level of before writing and when writing stage. They were outstanding in their writing process. The results of the journal entries and interviews showed that the participants frequently used dictionaries to get support in their writing at the stage of while writing strategies. On contrary participants were found less in making the timetables for their writing or the writing draft in the native language and then doing translation in L2 (English). Gordon (2008) investigated the use of writing strategies by conducting interviews. She interviewed two expert language writers in New Zealand at a private educational institute. According to her study there were some common traits of writing process of the students who had learnt the language successfully (p. 253). The results showed that the learners utilized a various variety of instructional strategies to improve their writing. The students read much the

target language and deeply observed the vocabulary of the text and grammatical and syntactic structures. They developed a lot of strategies to write the text outside of the classroom and other strategies like to plan the writing process and then monitor it; after monitoring it they used the revising strategies to bring the clarity and relevancy in their written passage.

Another study was carried out by Xiao (2016) to examine ESL writing strategies employed by the Chinese high school learners. The required data was taken from 52 students. A mixed method approach was applied to conduct this study comprising a questionnaire established by Petric and Czarl (2003) along with stimulated recall protocols and after-writing interviews. Like Maarof and Murat (2013), this study explored that the learners employed more writing strategies during When-Writing stage followed by Before Writing and Post-Writing stages; whereas, the use of the strategies was the lowest at the revising stage. Furthermore, he found valuable variation in the usage of ESL writing strategies by high proficient and low proficient learners.

Mohite (2014) found that good Polish EFL secondary school learners used various ESL writing strategies. He used mixed method approach to conduct the study, i.e. he used a questionnaire that was in accordance with Petric and Czarl's (2003) and Abdul-Rehman's questionnaire (2011) along with half-structured interviews, questionnaires, and written drafts of the learners. The findings reported that the students made average use of social and cognitive strategies. However, the usage of metacognitive ESL writing strategies was low. Dumlija (2018) also investigated the use of ESL writing strategies at different writing stages. This study was conducted on 300 Osijek secondary school students of second, third, and fourth grade. To investigate the use of ESL writing strategies, Petric and Czarl's (2003) questionnaire was used. Like Maarof and Murat (2013) and Xiao (2016), this empirical study also concluded that the

learners used ESL writing strategies at the moderate level. Moreover, they used more ESL writing strategies during When-Writing stage followed by Before-writing stage and Revising stage. Furthermore, the most frequently used ESL writing strategies were reading requirements, making mind plan, and using synonyms.

Another similar study was carried out by Gibriel (2019) in Egypt. The respondents of the study were 51 Egyptian fourth year learners of English Department Faculty of Arts. In this research, the questionnaire of Petric and Czarl (2003) was utilized to investigate the use of ESL writing strategies along with semi-structured interviews and ESL writing task. The results indicated that the most frequently used ESL writing strategies were reading requirements, taking start with introduction, and focusing on the feedback. The results of the interviews revealed that more successful students gave more importance to planning of their ESL writing task, whereas the less successful students did not make proper writing plans. Moreover, some strategies were found to be positively correlated with ESL writing achievements and some strategies exhibited a negative correlation.

Previous studies have proved that writing and writing strategies are solely dependent upon each other (Arifin, 2020; Chen, 2009; Chien, 2012; Yang & Plakans, 2012). Therefore, second language learners are supposed to be aware of and equipped with second language writing strategies (Sarab & Farsani, 2014; Jafari, Ketabi & Tavokoli, 2016).

In Pakistan, Haider (2012a) carried out research to explore the writing strategies used by ESL learners. It was based on qualitative research design. Five intermediate students were the participants of this study. Students were asked to write an essay to check the writing strategies they use. The research observed that only three of the students used pre-writing strategies but not

in an effective manner; whereas, all of the students used revising strategies. During revision, the participants made changes in spelling, vocabulary, and punctuation. Awan et al., (2021) carried out research on ESL writing strategies in English for Academic Purposes (EAP) in Pakistani context. Quasi-experimental research was done on 40 participants and their choice of writing strategies (cognitive, metacognitive and social) was considered. There was no focus on before writing stage, while writing stage and revising stage.

ESL writing strategy usage varies from context to context (Petric & Czarl, 2003). Of course, a lot of studies have demonstrated the employment of ESL writing strategies in different contexts and cultures but only two researches – one is qualitative at college level and other is quantitative at university level have been carried out to determine the use of ESL writing strategies by learners in Pakistani context. As their qualitative research design in Haider's (2012) study and sample was too small. Although Awan et al., (2021) used quantitative research design but there was only focus on the cognitive, metacognitive and social strategies. So, there was a dire need to explore the use of ESL writing strategies regarding ESL university learners by using quantitative research methodology in Pakistani context so that ESL writing strategies of a large sample might be analyzed to generalize results in Pakistani context. However, the present study has not only investigated ESL writing strategies used by Pakistani university learners but it has also examined their relationship with ESL learning styles to determine the role of learning styles and ESL writing strategies.

## **2.4. Previous studies on the relationship between learning styles and writing strategies**

Tari and Roslin (2021) investigated the correlative study on the learning styles and writing strategies on Iranian ESL learners. This study was consisted of 183 ESL learners who studying English at upper intermediate level. This study showed that pragmatic learning style was so significant and points out the writing strategies than that of activist learning style's contribution. Nikoopour and Khoshroudi (2021) explored the correlation between learning styles and self-regulated learning of Iranian ESL learners and there is significant relationship between students' learning styles and their self-regulation. Tasdemir and Arslan (2018) investigated the learners' preferences for oral corrective feedback with respect their learning styles to examine the correlation between these two variables. Results indicate that learning styles have no significant correlation with learning styles and feedback preferences. Akobirova and Sayfiyeva (2022) investigated whether the awareness of learning styles influences the language acquisition. The finding suggested that with the awareness of learning styles students can learn English better. Hawa (2019) investigated the preferred learning styles and self-efficacy levels and correlation between these two variables with respect to social interaction of EFL learners at Gaziantep University School of Foreign Languages GUSFL. The findings of the study have shown that here is a positive relationship between the learners' preferred learning styles, their self-efficacy, and their social interaction. Syafrizal (2020) investigated the correlation between students' learning styles and learning motivation in speaking ability of communication and learning motivation. A significant correlation was found between these variables. Al-Hebaishi (2012) investigated the learning styles and strategies preference and the correlation between these two variables. The study is only limited to female EFL students at Taibah University. The findings of the study indicated that there was lack of a significant relationship between learning



styles and academic performance. Feng (2019) explored the inherent correlation between learning styles, learning strategies and academic performance of Chinese students who were studying Spanish as a foreign language. The results of the study indicated a significant correlation between learning styles and learning strategies and performance. Sari, Imaniah and Hanim (2020) identified the relationship between ESL learners' learning style and writing strategies. This study reached at a point that the preferred learning styles of the students were not normally distributed. It showed that the ESL learners' learning styles and their writing strategies are not correlated to each other. This statement concluded that learning styles do not affect the writing of the students.

The previous studies showed that there fewer researches conducted on the correlation of learning style and learning strategies of ESL learners (Roashani and Albina, 2021a; Al-Hebaishi, 2012; Mulalic, 2009; Aqeel and Mahmoud, 2006; Ehrman and Oxford 1990). Learning strategies, writing improvement and learning performance in relation to learning styles have been done. Only Benitez-Correa et al., (2022) have investigated the writing strategies with learning styles but the results showed weak relationship between the two variables. Nikoopour and Khoshroudi (2021) explored the correlation between learning styles and self-regulated learning ESL learners by using quantitative research design. Tasdemir and Arslan (2018) investigated the learners' preferences for oral corrective feedback with respect their learning styles to examine the correlation between these two variables. Akobirova and Sayfiyeva (2022) investigated whether the awareness of learning styles influences the language acquisition.

In Pakistan only one study Awan et al., (2021) has been carried out to investigate the ESL writing strategies used by the Pakistani university students and their correlation with writing performance in ESP (English for Academic Purpose). The sample size of this study is only 15

participants that is a very small. However, the present study has investigated quantitative research design for ESL learning styles relationship with ESL writing strategies.

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

#### **3.1. Introduction**

This chapter showcases a comprehensive overview of the research types, research strategies, research design, and research tools that have been used in the study. Subsequently, other relevant points of research methodology have been discussed: research site, population, sample size along with the characteristics and consent of the participants. Then it highlights the procedures that have been used for the collection, normality, and reliability of the data. Lastly, issues related to the analysis of data and data display has been mentioned.

#### **3.2 Type of Research**

There are two broad categories of research: primary research and secondary research (Blumberg Cooper & Schindler, 2005). The present research collected primary data by conducting a survey as the required data did not exist before hand. The researcher collected this data from COMSATS University Islamabad, Lahore Campus.

#### **3.3. Research Strategy**

Research strategy indicates “*a general orientation to the conduct of social research*” (Bryman, 2016). In social sciences research, two research strategies are used: quantitative and qualitative. One of the major distinctions between these two research strategies is that quantitative research strategy collects and examines data in the form of numbers; whereas,

qualitative research focuses on collecting and examining data in the form of words (Bryman, 2016).

Although both the strategies have their own advantages and disadvantages, but the researcher preferred to use quantitative research strategy. The reason of preferring quantitative research strategy is that it permits to collect data from a large sample and thus outcome of the investigated phenomenon can be generalized to a larger relevant population in a particular context (Bryman, 2016). Another reason to prefer this strategy is that quantitative research is free of the researchers' own perspectives and beliefs about the phenomenon. As the data is analyzed by using numerical and statistical ways that are purely objective, it removes any chances of the inclusion of any subjective influences and biases of the researcher during data analysis (Bryman, 2016). Thus, the quantitative research strategy proved useful in finding and presenting a more accurate and truer picture of the investigated phenomenon.

### **3.4. Research Design**

A research design entails “a detailed outline of how an investigation will take place. A research design will typically include how data is to be collected, what instruments will be employed, how the instruments will be used and what are the intended means for analyzing data collected” (Bryman, 2016). The current research involved a cross-sectional research design. By using a cross sectional design, “quantitative or quantifiable data” regarding study variables is gathered “at a single point in time” by taking a sample of the population (Bryman, 2016).

The current study collected quantitative data regarding the study variables by using questionnaires from 200 students of COMSATS University Lahore campus at the time of study.

### **3.5. Research Tool**

Questionnaires are the main tools used in the present study. The researcher employed two questionnaires as quantitative research tools to investigate ESL learners' learning styles and ESL writing strategy usage (See appendix A&B). These are close-ended questionnaires. In a closed-ended questionnaire the possible options are given and the participant has to select the option that best describes the respondent's answer (Kumar, 2019).

The rationale of using questionnaires is that they provide anonymity. They are best to acquire accurate information when sensitive information is asked from the respondents (Kumar, 2019). As some respondents might hesitate while giving response about their ESL writing anxiety in a direct interaction, the questionnaire was considered the most appropriate research tool in order to collect the accurate information. Moreover, questionnaire is a way of getting the required responses from a huge number of respondents (Kumar, 2019). As the researcher wanted to get data from a large sample to generalize the results, it was most suitable to get the data by using questionnaires. The current study used two questionnaires to collect the data. One is related to ESL learning styles and the other is related to ESL learners' writing strategies.

### **3.6. ESL Learning Styles Questionnaire**

To investigate the usage of ESL learning styles of the students Reid's (1984) Perceptual Learning Style Preference Questionnaire has been adapted. It is because its validity has been investigated by Reid (1984). This questionnaire is used in researches (Rafique, 2017; Atika, 2019). It is based on close ended question items and likert-scale.

### **3.7. ESL Writing Strategy Questionnaire**

To inquire the use of ESL writing strategies, the researcher employed a questionnaire devised by Petric and Czarl (2003) in the article “Validating a Writing Strategy Questionnaire” (see appendix B). The researchers of ESL writing strategies develop questionnaires to know about self-reported writing strategies that are used by ESL writers. A writing strategy questionnaire makes the students able to consciously think about their ESL writing practices (Haslam & McGarty, 2007).

The rationale of using this questionnaire is that its validity and reliability have been thoroughly tested and proved by Petric and Czarl (2003). Furthermore, another reason for using this questionnaire is that it has strong theoretical basis as its construction is based on the theoretical framework of LLSs. It allows respondents to give answers according to their specific experiences in their own contexts (Petric & Czarl, 2003). That is why several researchers have employed this questionnaire to inquire the use of ESL writing strategies in their contexts (e.g., Al-Asmari, 2013; Al\_Sawalha & Chow, 2012; Dumlija, 2018; Gibriel, 2019; Maarof & Murat; Xiao, 2016).

Petric and Czarl (2003) indicate that their questionnaire has been formulated on the basis of Flower and Hayes’ model of writing process (1981). This model considers that the writing process consists of three stages: planning, converting the ideas into written expression, and revising. Moreover, this model highlights the concept of recursive writing during the whole writing process. That is why Petric and Czarl’s questionnaire investigates the use of ESL writing strategies at three writing phases: Before Writing phase, When Writing phase and Revising phase. But it does not mean that these three stages are purely independent stages. Petric and Czarl (2003) have used the idea of recursive writing while formulating the items of the

questionnaire and indicated that the strategy statements “point to the overlap of the stages and the non-linear nature of the writing process” (p. 190).

More specifically, this questionnaire comprises 38 ESL writing strategy statements. The Before writing stage of the questionnaire consists of 8 items, When Writing stage has 14 ESL writing strategy items, and Revising stage has 16 ESL writing strategy items. The response format of the questionnaire is in line with Oxford’s (1990) SILL questionnaire (Petric & Czarl, 2003) and uses a five-point likert scale that ranges from 1 (*Never True*) to 5 (*Always True*).

### **3.7.1. Validity and Reliability of ESL Writing Strategy Questionnaire**

Petric and Czarl (2003) have indicated that they have thoroughly tested its content validity and revised it by taking help of the experts of the field and by testing the questionnaire items in a pilot study. Content Validity of a questionnaire means whether the items of a questionnaire really measure the concept or the issue for which that questionnaire has been developed (Kumar, 2019). Moreover, Petric and Czarl (2003) tested the reliability of the questionnaire items by employing a detailed test-retest method (Petric & Czarl, 2003).

## **3.8. Population and Sample Size**

### **3.8.1. Population of the Study**

Population refers to the whole set or universe of units from which the sample of the research study is chosen (Bryman, 2016). The population of current study was undergraduate learners of different departments of COMSATS University Islamabad, Lahore campus who were studying the module of ECC (English Comprehension and Composition) in their first semester course. The researcher chose these students because, as a student of the same university, it was

convenient for him to access the target population and get the required data from the willing participants with permission of teachers and consents of the students.

### **3.8.2. Sampling Technique and Sample Size**

Sample means “the segment of the population that is selected for investigation” (Bryman, 2016). Two broader categories of sampling are Random and Non-random sampling. In Random sampling, each constituent of the population has the same probability to be selected because of random selection. Non-random sample is the sample in which each constituent of the population has not the same probability to be selected as selection of the units is not done randomly (Bryman, 2016).

In this research, data was collected from a sample of 200 students. Simple random sampling technique was used to collect quantitative data from the students. The reason of choosing random sampling technique was that a random sampling technique is more accurate to get the results more accurate. The sample is more representative of the relevant study population because of random selection of the participants and thus the results can be generalized (Bryman, 2016). Moreover, it removes any chances of researchers’ sampling biasness (Bryman, 2016). The researcher selected simple random sampling technique because it was easy to follow. As its name implies, simple random sampling technique is much less complex technique than other random sampling techniques such as stratified random sampling.

### **3.9. Characteristics of the Participants**

The participants were English non-majors studying in different departments of COMSATS University Islamabad, Lahore campus such as the students of BSE (Bachelor of



Science in Education), BS Mathematics, BBA (Bachelors in Business Administration), BSCE (Bachelors in Computer Engineering), BSSE (Bachelors in Software Engineering), BSCS (Bachelors in Computer Science), BSEE (Bachelors in Electrical Engineering), BS Physics, and BS Chemistry. All the participants were enrolled in 1<sup>st</sup> semester of different undergraduate programs who were studying ECC (English Comprehension and Composition) module. While studying ECC module, they had exposure to writing process. They were writing argumentative and descriptive essays in class along with other English writing activities. The sample was not having equal ratio of both genders (men=110, women=90). Age of the respondents ranged between 16 to 24 years.

### **3.10. Consent of the Participants**

Researchers should follow the ethical considerations while conducting research. That is why the researcher followed the ethical practices described below. Before starting to collect data, the researcher visited the concerned teachers and informed them about the aims of the research study and requested them to allocate a few minutes of their scheduled classes to carry out this study and permit their students to be a part of it. The teachers were of the view that the study might prove useful for students in their L2 learning process and it might also provide helpful ESL pedagogical implications as well.

Then, the researcher also obtained consent of the respondents. They were told about the goals of the research study in the following two ways:

- 1) The researcher announced to them the research purpose.
- 1) Their consent was acquired by an informed consent form.

A significant ethical consideration is the assurance of anonymity and secrecy of the participants of study (Bryman, 2016). They were ensured that their obtained data would be kept secret and it would be used only for the research purpose. Moreover, their names would not be revealed anywhere in the research study. Furthermore, they were told that it was not compulsory to take part in the study. Instead, it was up to their choice.

### **3.11. Data Collection Procedure**

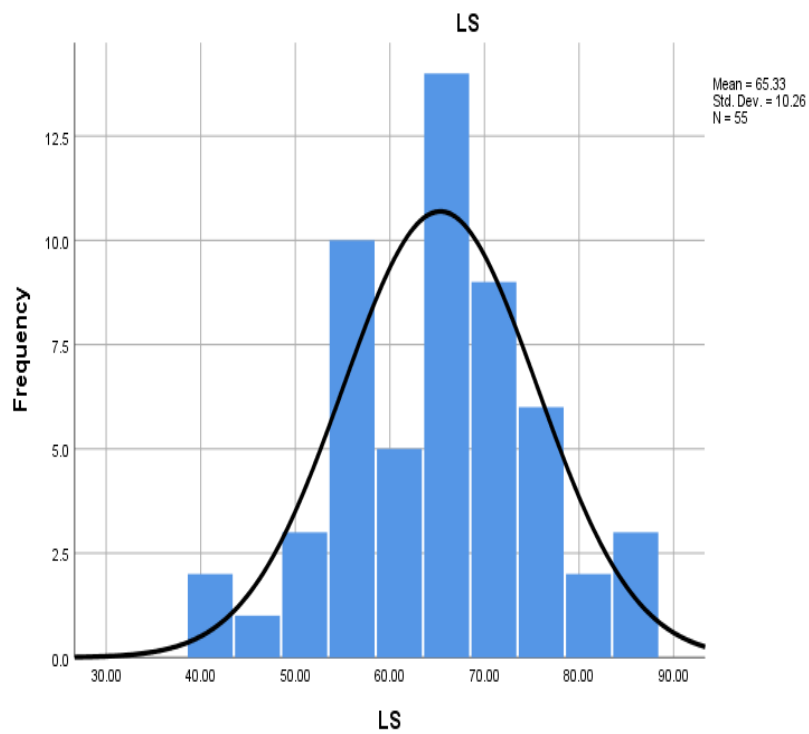
The questionnaires were given to the participants. Data collection procedure was administered during the scheduled ECC (English Comprehension and Composition) classes and this procedure took 25 to 30 minutes. The students were free to ask about the points or questionnaire statements which were not clear to them. Such ambiguous points were being cleared during the process of administration.

### **3.12. Test for Data Normality**

The skewness and kurtosis values have been computed by using SPSS in order to ensure that data is normally distributed. According to Pallant (2011), the acceptable values for skewness and kurtosis should be in between -2 and +2.

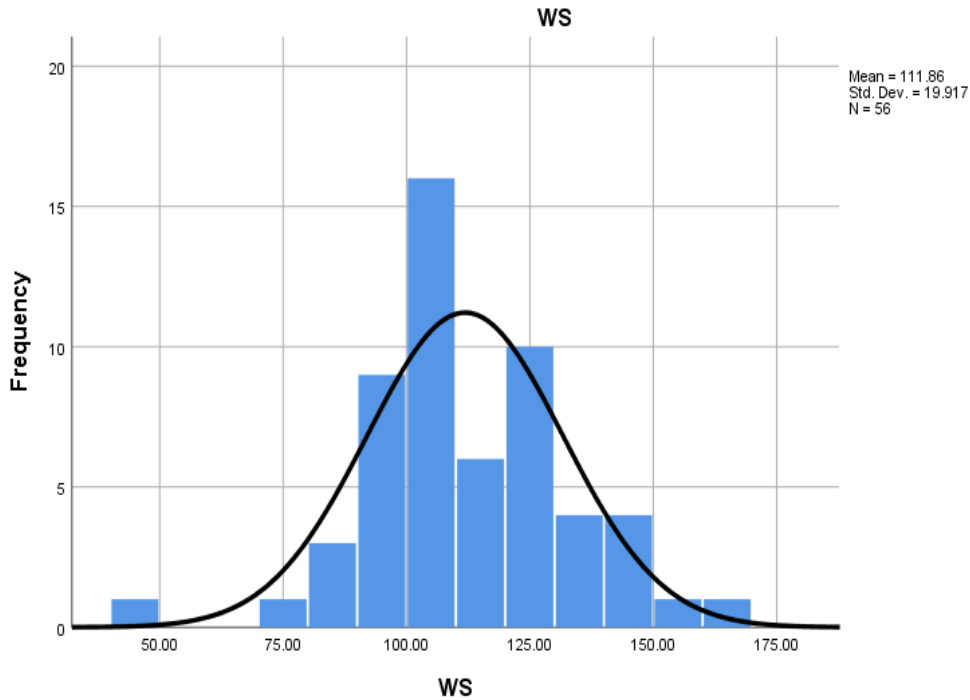
*Table 3.1: Skewness and Kurtosis of the Questionnaire Items*

<b>Scale</b>	<b>Skewness</b>	<b>Kurtosis</b>
Learning Styles	-.141	.188



*Figure 3.1 Skewness and Kurtosis of the Questionnaire Items*

In figure 3.1, skewness and kurtosis of questionnaire of Reid (1984) is between -2 and 2. The questionnaire is in symmetrical order and the curve is like bell shape so data is normally distributed.



*Figure 3.2 Skewness and Kurtosis of the Questionnaire Items*

In figure 3.2 the Skewness and Kurtosis of the Questionnaire Items proposed by (Petric & Czarl, 2003) is normally distributed because the values of skewness and kurtosis are between -2 and 2. The curve of data distribution is bell shaped.

### **3.13. Reliability of the Questionnaires**

The Cronbach's alpha of the scales show that the scales are adequately reliable and suggest that Cronbach's alpha coefficients are greater than the lowest value of 0.70.

Table 3.2: *Cronbatch's Alpha Coefficients of the Questionnaire Items*

Scale/Sub-Scale	Cronbatch's Coefficient	Alpha	Number of Items
1) ESL Writing Strategies Inventory (Petric and Czarl,2003)	.854		38
2) Learning styles (Reid 1984)	.663		30

Table (3.2) indicates the reliability of scales and sub-scales for the present study. The Cronbatch's alpha of all the scales is greater than 0.70 that shows that the collected data by using these scales is consistent and acceptable. The Cronbach's alpha of ESL Writing Strategies Inventory for the current study is 0.854. The Cronbach's alpha of Reid's learning style is .663. These statistical findings suggest a high degree of reliability of the questionnaire items in the present study (Pallant, 2011). Finally, correlation of ESL wring strategies and ESL writing anxiety has been computed by using *Pearson correlation* of SPSS.

### **3.14. Presentation of the Results**

After the data analysis, the next act was to display the results clearly and effectively. The findings have been presented in the form of graphs and tables with assistance of computer programs such as MS Word and SPSS. Thus, the detailed information was presented in a little space so that the reader could come to know about the findings in a glance.

# CHAPTER 4

## ANALYSIS AND RESULTS

### 4.1. Introduction

This chapter is concerned with the analyses the collected data regarding ESL learning styles and ESL writing strategies to get the results. It first discusses the background information of the students from whom the required data has been collected. Then it analyses the gathered data to acquire results of the research questions by using the statistical software SPSS.

The first objective of this study was to figure out ESL learning styles that are used the most and the styles that are used the least by the students of Pakistani universities during ESL learning process. The second objective was to inquire the ESL learners' writing strategies while writing English. The last objective is to do the relationship of their ESL learners' learning styles and ESL writing strategy. Thus, this chapter first analyzes the students' responses about ESL learning styles that have been collected by using the writing strategy questionnaire. Then, the students' responses about ESL writing strategies have been analyzed. These responses have been collected by employing the questionnaires. Descriptive statistics i.e., mean scores and standard deviation have been used to measure the respondents' use of ESL writing strategies. Similarly maximum values, minimum values, and mean scores have been computed to measure their ESL writing strategies. Furthermore, *Pearson correlation* of SPSS has been used to know about the correlation of the two investigated phenomena. The collected data from both the questionnaires has been analyzed and presented in two stages. In the first stage, the results of the questionnaires

have been presented in tables and figures. In the second stage, the findings of the descriptive statistics have been analyzed.

## **4.2. Background Information of the Sample**

The collected data of 200 questionnaires was analyzed. Part one of questionnaire (see appendix A&B) asked some general information about the sampled students. Following is a discussion of the background information of the sampled students that is based on the learners' answers to the "General Questions" part of the questionnaire.

## **4.3. Gender Distribution of the Participants**

The sample of the students had an unequal proportion of male and female learners i.e., the sample consisted of 110(55%) male students and 90 (45%) female students as shown in following table (4.1).

*Table 4.1: Gender Distribution of the Participants*

<b>Gender</b>	<b>Number of Participants (%)</b>
Male	110 (55%)
Female	90 (45%)
Total	200 (100 %)



#### 4.4. Age of the Participants

The range of the participants' age was from 16 years to 22 years. The average age of the respondents was 19 years.

*Table 4.1 Age Range of the Participants*

<b>Number of Participants</b>	<b>Minimum Age</b>	<b>Maximum Age</b>	<b>Average Age</b>
200	16	22	19

##### 4.4.1. Participants' Native Languages

There was a diversity of the participants' native languages. Native languages of the participants that have been reported are: Punjabi, Urdu, English, Siraiki, Pashto and Shina, i.e., 2 (.07 %) students' native language was Pashto, native language of 85 (27.96 %) students was Punjabi, 1 (.33%) student's native language was Shina, 12 (3.95 %) students' native language was Siraiki and 204 (67.10%) students' native language was Urdu.

Table 4.2: *Distribution of the Participants' Native Language*

Native Language	Number of the Participants (%)
Punjabi	120 (60 %)
Urdu	40 (20%)
Siraiki	30 (15%)
Pashto	10 (5%)
Total	200(100%)

## 4.5. Statistical Results

The results of the collected data have been analysed and discussed according to the research questions.

### 4.5.1. Research Question 1

Which are the different learning styles of EFL Pakistani university learners of COMSATS Lahore?

To answer this research question, the related data has been analyzed in two parts. First, descriptive statistics have been used to analyze the learners' responses about the collective use of ESL learners' learning styles i.e., visual, auditory, kinesthetic, tactile, group and individual.

Mean scores and standard deviation have been calculated for the use of particular sets of ESL learners' learning styles at each style of learning.

In the second part of the investigation, a more in-depth descriptive analysis for each group of ESL learning style has been carried out. This has been done to find out more specifically which learning style has been used by ESL learner most frequently and least frequently. Mean scores and standard deviation have been calculated of each learning style adopted by the ESL learners.

The researcher has categorized ESL learning styles usage by following the criterion suggested by Reid's (1984) Perceptual Learning Style Preference Questionnaire. The researcher has followed Reid's (1984) because it divides learning styles into five learning styles into five categories visual, auditory, kinesthetic, tactile, group and individual.

In the table, ESL learning styles have been shown at each level. These findings are based on the respondents' data about ESL learning styles.

*Table 4.3 Descriptive Statistics for the Collective Use of ESL learning Styles by ESL Learners (N=200)*

ESL Learning Styles	Mean	SD
Visual	11.20	3.24
Auditory	11.08	2.72
Kinesthetic	10.22	2.83
Tactile	10.44	2.99
Individual	10.50	3.18
Group	10.37	3.75

Table (4.3) shows that the respondents employ ESL learners' learning styles usage of learning styles respectively i.e., visual (M=11.20; SD=3.24), auditory (M=11.08; SD=2.72), individual (M=10.50; SD=3.18) tactile (10.44; SD=2.99), group learning style (10.37; SD=3.75) and kinesthetic (M=10.22; SD=2.83). Finally, the mean score of visual learning style (M=11.20; SD=3.24) shows that the ESL learners tend to use the visual learning style the most. After visual, the learners use auditory learning style as the mean score shows (M=11.08; SD=2.72).

In table (4.3) and figure (4.1) visual and auditory learning styles are the most preferred learning styles of ESL learners of COMSATS University. The graphs of visual and auditory learning styles are highest in the figure (4.1). So, the findings proved that COMSATS Lahore students are visual and auditory learners.

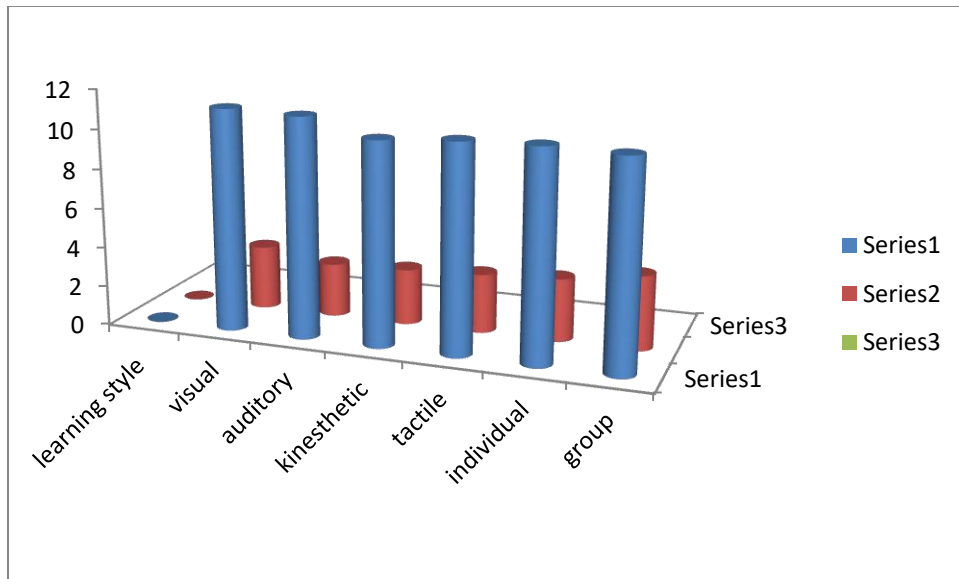


Figure 4.1 *Descriptive Statistics for the Collective Use of ESL learning Styles by ESL Learners (N=200.)*

As far as the use of learning styles are concerned, the descriptive statistical results presented in the Table reveal that the learners of COMSATS University Lahore campus are mostly visual and auditory learners according to their learning styles.

Table 4.4: The Detailed Analysis of ESL Learning Style at each Question Items

<b>ESL Learning Styles</b>	<b>Mean</b>	<b>SD</b>
<b>1. Visual Learning Style</b>		
I learn better by reading what the teacher writes on the board.	1.76	.94
I highlight the text in different colors when I read.	2.84	1.39
I understand better when I read instructions or information	1.67	0.75
I learn better by reading than by listening to someone.	2.28	1.08
I learn more by reading textbooks than by listening lectures.	2.66	1.31
<b>2. Auditory Learning Style</b>		
When the teacher tells me the instructions, I understand better.	2.09	1.04
When someone tells me how to do something in class, I learn it better.	2.26	0.94
I remember things I have heard well than things I have read	2.45	0.97

I prefer listening to the lecture in class.	2.17	0.92
I learn better in class when I listen to someone rather than participate in it.	2.12	1.04
<b>3.Kinesthetic</b>		
I prefer to learn by doing something in class.	2.05	1.03
I concentrate better when I move around (e.g., pacing or my tapping feet).	2.17	1.24
I prefer hands-on activities to learn better (e.g., experiments, etc.).	2.05	1.05
I understand things better in class when I participate in role-playing.	2.10	1.15
When I speak, I move my hands a lot to express myself better.	1.84	0.89
<b>4.Tactile Learning Style</b>		
I learn more when I can make a model or graph of something.	2.03	0.97

I learn more when I make something for a class project (e.g., posters, flashcards, etc.).	2.02	1.10
I learn better when I make drawings as I study.	2.09	0.96
When I build something, I remember what I have learned better.	1.98	0.96
I usually draw diagrams or charts of important points when I study.	2.33	1.20
<b>5.Group Learning Style</b>		
I get more work done when I work with others.	2.05	1.115
I like discussion in class and group projects	2.19	1.083
I love to share my ideas with my classmates.	2.16	1.073
I enjoy working on an assignment with two or three classmates.	1.02	1.051
I prefer to study with others because only then I remember things better.	1.97	1.154



<b>6.Individual Learning Style</b>		
When I study alone, I remember things better.	2.34	1.22
I like to think on my own before listening to others.	1.90	0.83
In class, I work better when I work alone.	2.21	1.15
I prefer working on projects by myself.	2.05	1.09
I prefer my own ideas when I solve problems.	2.00	0.97

#### **4.5.2. Research Question 2**

Which writing strategies do Pakistani university learners of COMSATS Lahore use the most during their ESL writing process?

To answer this research question, the related data has been analyzed in two parts. First, descriptive statistics have been used to analyze the learners' responses about the collective use of ESL writing strategies of each writing stage i.e., Mean scores and standard deviation have been calculated for the use of particular sets of ESL writing strategies of each writing phase. In the second part of the investigation, a more in-depth descriptive analysis for each group of ESL writing strategies has been carried out. This has been done to find out more specifically which of the Before Writing, When Writing, and Revising ESL strategies are used most frequently and

least frequently by the respondents at each writing phase. Mean scores and standard deviation have been calculated for the individual ESL writing strategy usage of each ESL writing phase.

The researcher has categorized ESL writing strategy usage by following the criterion suggested by Oxford (1990). The researcher has followed Oxford (1990) because it divides strategies into three levels according to the frequency of their usage. Thus, “Level” of strategy usage indicates the “frequency” of the use of a strategy or a specific set of strategies by “most of the students”. This criterion of Oxford (1990) has also been used by many researchers to analyze most frequently and least frequently used ESL writing strategies (e.g., Dumlija, 2018; Maarof & Murat, 2013; Xiao, 2016).

#### **4.5.2.1. The Collective Use of ESL Writing Strategies at Each Writing Stage**

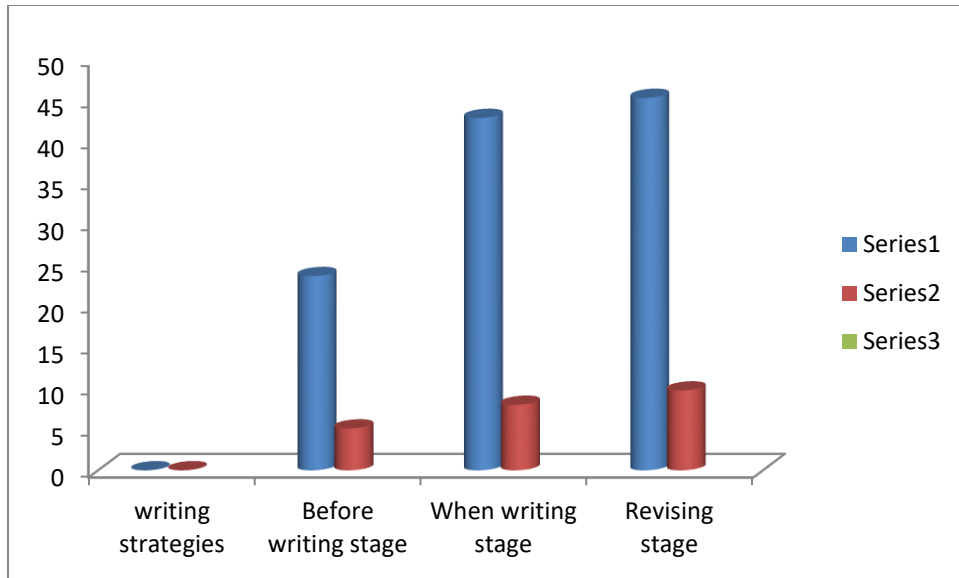
Table shows the collective use of ESL writing strategies at each writing stage. These findings are based on the respondents’ data about ESL writing strategies

Table 4.5 *Descriptive Statistics for the Collective Use of ESL Writing Strategies at Each Writing Stage (N=200)*

<b>ESL Writing Strategies</b>	<b>Mean</b>	<b>SD</b>
Before writing stage	23.71	5.13
When writing stage	42.85	8.03
When revising stage	45.28	9.79

Table demonstrates that the respondents employ ESL writing strategies of Before Writing stage at very low level ( $M=23.71$ ;  $SD=5.13$ ). As far as When Writing stage is concerned, it is clear that the students employ ESL writing strategies at medium level at this stage as well ( $M=42.85$ ;  $SD= 8.03$ ). Finally, the mean score of Revising Stage reveals that the respondents employ the strategies at maximum level on this stage also ( $M=45.28$ ;  $SD=9.79$ ).

In figure (4.5), writing strategies at revising stage are used the most frequently by the ESL learners of COMSATS Lahore. The results of table (4.5) and figure (4.2) have clearly shown the use of strategies at revising stage are the highest.



*Figure 4.2 Descriptive Statistics for the Collective Use of ESL Writing Strategies at Each Writing Stage (N=200).*

Although ESL writing strategy usage is at medium level at each writing stage but by comparing the mean scores of these three writing stages, it can be observed that the students use ESL writing strategies more frequently at When Revising stage as its mean score ( $M=45.28$ ) is greater than the mean score at Before Writing stage ( $M=23.71$ ) and When Writing stage ( $M=42.85$ ). Whereas, the use of ESL writing strategies at Before Writing stage is lower ( $M=23.71$ ) than their use at when writing stage ( $M=42.85$ ).

As far as the use of Total ESL writing strategies is concerned, the descriptive statistical results presented in the Table reveal that the learners of COMSATS University Lahore campus use the when revising strategies at the high level as mean score and standard deviation show ( $M=45.28$ ;  $SD=9.79$ ).

#### **4.5.2.2. The Detailed Analysis of ESL Writing Strategies at Each Writing Stage**

*Table 4.6 Descriptive Statistics for the Individual ESL Writing Strategies of Each Writing strategies (N=200).*

---

<b>Before writing stage</b>	<b>Mean</b>	<b>SD</b>
I learn better by reading what the teacher writes on the board.	1.73	0.88
I highlight the text in different colors when I read	2.80	1.42
I understand better when I read instructions or information	1.55	0.80
I learn better by reading than by listening to someone.	2.27	1.18
I learn more by reading textbooks than by listening lectures.	2.77	1.26
<b>When writing stage</b>		
I start with the introduction	3.70	1.45
I stop after each sentence to read it again	3.13	3.13
I stop after a few sentences or a whole paragraph, covering one idea.	3.52	1.19

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I reread what I have written to get ideas how to continue.	3.36	1.24
<b>When Revising stage</b>		
I read my text aloud	2.43	1.29
I only read what I have written when I have finished the whole paper.	2.91	1.41
When I have written my whole paper, I hand it in without reading it.	2.46	1.29
I use a dictionary when revising.	2.66	1.40

---

The above table shows usage of writing strategies with respect to individual stage by the ESL learners. The most frequently used strategies are the when writing strategies as the mean score ( $M > 3$ ) and the when revising strategies are at moderate level as the mean score ( $M < 3$ ) that shows the moderate usage of the strategies by the ESL learners and the before writing strategies are used moderately as well as at low level because the mean score of two question items is less than two that is “I learn better by reading what the teacher writes on the board” ( $M=1.73$ ) and “I understand better when I read instructions or information” ( $M=1.55$ ).

So, the ESL learners of COMSATS Lahore are the most users of the when writing strategies at the individual stage.

### 4.5.3. Research Question 3

Is there any significant between the ESL learning styles and writing strategies?

To answer this research question, the researcher has used Pearson correlation to calculate correlation coefficients of ESL writing strategy usage at different writing stages with overall ESL learning styles and with its diverse kinds based on the respondents' acquired data.

*Table 4.7: The Correlation Coefficients between ESL Learning Styles and Writing Strategies (N=200).*

		LS	WS
LS	Pearson Correlation	1	.295*
	Sig. (2-tailed)		.027
WS	Pearson Correlation	.295*	1
	Sig. (2-tailed)	.027	

Correlation is significant at the 0.05 level (2-tailed).

**Note:** \* $p < 0.05$  (2-tailed) \* $P = 0.027$  \*\* $p < 0.01$  (2-tailed)

The table shows the findings of correlation between ESL learners' learning styles and writing strategies. ESL learning styles have highly correlated with the ESL writing strategies as the 2-tailed Pearson correlation values indicate ( $r = .295$ ,  $p = .027$ ). According to the values of the Pearson correlation, the Pearson coefficient and significant value meet the criteria of the strong

correlation. So, the ESL learners' writing strategies are affected by their ESL learning styles at the university level.

**Table 4.8 The Correlation Coefficients between ESL Writing Strategies and different Learning Styles (N=200).**

	1	2	3	4	5	6	7	8	9
1.Visual		-.014	-.074	.092	.153	.037	.190	.121	.144
2.Auditory			.229	.282*	.252	.173	.164	.006	.194
3.Kinesthetic				.168	.059	.154	.120	.130	.296*
4.Tactile					.449**	.359**	.322*	.198	.297*
5.Group						.091	.155	.170	.139
6.Individual							.100	.027	.105
7.Before writing								.601**	.657**
8.When writing									.518**
9.Revising									

**Note:** \*p<0.05 (2-tailed) \*\*p<0.01 (2-tailed)

Table 4.8 reveals that the students' visual ESL learning style is positively correlated with Before ESL Writing strategies as correlative coefficient shows the following values



( $r=.190$ ;  $p=.038$ ), at the when writing stage, the visual learning style of the ESL learners is also positively correlative with as the value of Pearson Correlation coefficient indicates as ( $r=.121$ ,  $p=.030$ ), ESL learners' visual learning style is positively significant with the when revising writing strategies as the results show ( $r=.144$ ;  $p=.019$ ).

Like the visual learning style of the ESL learners, auditory learning style of the respondents is also highly significant with the writing strategies. Auditory learning style at the before writing strategies is positively correlated in the response of the students as the values show ( $r=.164$ ;  $p=.045$ ). Similarly, auditory learning style of the ESL learners at the use of when writing strategies shows positive correlation as the correlation coefficient shows ( $r=.006$ ;  $p=.035$ ). Finally, the auditory learning style of the ESL learning style with respect to when revising strategies also has correlated positively as the values indicate ( $r=.194$ ;  $p=.025$ ).

With respect to kinesthetic learning style of the ESL learners, there is also a significant correlation with the ESL writing strategies. the results show that the kinesthetic learning has positive correlation with ESL writing strategies at the stage of before writing ( $r=.120$ ;  $p=.042$ ), at the stage of when writing the correlation with kinesthetic learning style is also bounded positively with each other as the correlation coefficient shows ( $r=.130$ ;  $p=.026$ ) and the correlation between kinesthetic and when revising writing strategies is also significant as ( $r=.296$ ;  $p=.014$ ).

Similarly, the tactile learning style of the ESL learners also has a correlation with ESL writing strategies. The correlation at the stage of before writing strategies is also significant because the values show ( $r=.322$ ;  $p=.022$ ). The correlation of tactile learning style at the when writing strategies is ( $r=.198$ ;  $p=.065$ ) so there is no correlation because is  $p > .05$  and in the same

way tactile learning style at the revising strategies has no correlation because the value of p is greater than the required values ( $r=.297$ ;  $p=.089$ ).

Group learning style also correlates with the ESL writing strategies. So, the group learning style has the positive correlation with before writing strategies as the results show ( $r=.155$ ;  $p=.031$ ). The correlation between group learning and when strategies is positive ( $r=.170$ ;  $p=.041$ ) and at the stage of when revising the correlation between the group learning style and writing strategies is also significant because the correlation coefficient and p values is as ( $r=.139$ ;  $p=.034$ ).

Moreover, the individual ESL learning style also has the positive correlation with the ESL writing strategies at the three stages of writing. There is positive correlation at the before writing stage as the values show ( $r=.100$ ;  $p=.24$ ), at the when writing stages, the ESL individual leaning style also make a correlation at the when revising strategies as the values of correlation coefficient and significant value show ( $r=.105$ ;  $p=0.021$ ).

# CHAPTER 5

## DISCUSSION

### 5.1 Introduction

This chapter discusses the findings that have been statistically analyzed in the previous chapter. These results have been discussed in detail based on the formulated research questions as well as by keeping the aims in mind conduct this study. Furthermore, the results have been cross- validated with the previous studies.

#### 5.1.1 Research Question 1

Which are the different learning styles of EFL Pakistani university learners of COMSATS Lahore?

The very first objective of the study was to investigate the ESL learners' learning styles of the COMSATS University-Lahore that which learning style the ESL students tend to adopt in their learning L2 (English). To fulfill this objective, the collected data about ESL learning styles by using the Reid's (1984) Perceptual Learning Style Preference Questionnaire has been analyzed in table 4.4 by calculating the Mean score and standard deviation.

In the table the findings show that the visual and auditory are the towering ones and ESL students at COMSATS University used at maximum level as the Mean score (M= 11.20 and 11.08) respectively then other learning styles are preferred by the students. Visual learners prefer to learn via the visual channel. Therefore, they like to read a lot, which requires concentration

and time spent alone. Visual learners need the visual stimulation of bulletin boards, video and movies. They must have written directions if they are to function well in the classroom"(Oxford, 1995, p. 35). Auditory learners enjoy the oral-aural learning channel. Thus, they want to engage in discussions, conversations, and group work. These students typically require only oral directions". (Oxford, 1995, p. 36). And the mean score of the kinesthetic is (M=10.22) that is less than that of the visual and auditory learning style of the COMSATS University Lahore. Kinesthetic learners are those who *"imply total physical involvement with a learning environment such as taking a field trip, dramatizing, pantomiming, or interviewing"* (Kinsella, 1995, p. 172). Then the tactile ESL learning style is consisted of the mean score (M=10.44) and

“Tactile learners get the point of view by involving into the activity with their own personal experience like writing, drawing, building a model, or conducting a lab experiment” (Kinsella, 1995, p. 172). Group and individual learning styles with mean score respectively (M=10.50; M=10.37) have been adopted by the ESL students in the COMSATS University Lahore. The findings are consistent with some of the previous studies that the students use the visual, tactile and kinesthetic learning styles of the students like (Huang, Ka & Teo, 2018; Benitez-Correa et al, 2022; Srijongjai, 2011; Aliakbari and Tazik, 2019; Sari, Imaniah and Hanim, 2020; Tazik and Aliakbari,2018; Khojasteh and Pishkar,2015).

Derakhshan and Shakki (2018) investigated that ESL learners are more associated to tactile as well as kinesthetic learning style as oppose to individual, visual, group and auditory whereas the learners have the lower abilities of learning language are in favor of visual and group study. Mulalic, Mohd Shah and Ahmad (2009) attempted to determine the learning styles of the students, and the differences in learning styles of the students according to their gender and ethnicity. Results revealed that the students’ preferred learning style was Kinesthetic. They

expressed minor preference for Visual, and Auditory. Individual boys did not necessarily prefer a kinesthetic learning style compared to a visual or auditory one; indeed, data from across the four schools reveals that few boys apparently held such preferences and that the proportions of boys and girls identified as having a kinesthetic learning style were very similar (Bricheno & Younger,2004). Kho (2018) explored that kinesthetic way of learning is recorded as effective to ESL learners as it is calculated highest in mean score ( $M=20.34$ ). It is the most preferred learning style by ESL learners in Malaysia. In the same way, Mohammad and Rashid (2013) investigated that ESL students tend to adopt kinesthetic learning style as it recorded (42%) between other learning styles.

Huang, Ka & Teo (2018) investigated the most preferred learning styles of ESL learners and they found that the students in chines university students prefer to adopt kinesthetic, visual and auditory styles to learn English as second language.

Benitez-Correa et al., (2022) investigated that learning styles of ESL learners like visual, auditory, reading and writing, and kinesthetic are the very factors that affect the writing strategies. Srijongjai (2011) explored that learning styles (visual, auditory, reading and writing, and kinesthetic) have the correlation with writing strategies in L2 (English). He concluded that learning styles play an important role to the perception of writing strategies of ESL learners.

Therefore, the findings show that students of the COMSATS University Lahore are the visual and auditory learners. As the calculation and measures of the collected data indicate visual learning style ( $M=11.20$ ;  $SD= 3.24$ ) and the mean score and  $SD$  of the auditory learning style is ( $Mean=11.08$ ;  $SD= 2.72$ ).

The kinesthetic learning style is on the third priority by ESL learners of the students of COMSATS University Lahore as the mean score and standard deviation as following (Mean=10.22; SD2.83).

Tactile learning style of the ESL learners is close to the kinesthetic learning style as the results show that kinesthetic and tactile learning styles are running pace to pace as the mean score of tactile is  $M=10.44$ ;  $SD=2.83$ ). Therefore, the students of the COMSATS University Lahore are found using different types of learning styles in their learning L2. So, some of the findings are similar with the previous studies as tactile and kinesthetic learning styles are frequently used in the previous studies Mohammad and Rashid (2013). But the respondents of this study are the most users of the visual and auditory learners.

### **5.1.2 Research Question 2**

Which are the writing strategies Pakistani university learners of COMSATS Lahore use the most during their ESL writing process?

The second objective of the current study was to figure out the ESL writing strategies that are used most frequently and the strategies that are used least frequently by COMSATS university students during their ESL writing process. For this purpose, the results were analyzed in the table (4.6). Table demonstrates that the respondents employ ESL writing strategies of Before Writing stage at very low level ( $M=23.71$ ;  $SD=5.13$ ). As far as When Writing stage is concerned, it is clear that the students employ ESL writing strategies at medium level at this stage as well ( $M=42.85$ ;  $SD= 8.03$ ). Finally, the mean score of Revising Stage reveals that the respondents employ the strategies at maximum level on this stage also ( $M=45.28$ ;  $SD=9.79$ ).

Although ESL writing strategy usage is at medium level at each writing stage but by comparing the mean scores of these three writing stages, it can be observed that the students use ESL writing strategies more frequently at When Revising stage as its mean score ( $M=45.28$ ) is greater than the mean score at Before Writing stage ( $M=23.71$ ) and When Writing stage ( $M=42.85$ ). Whereas, the use of ESL writing strategies at Before Writing stage is lower ( $M=23.71$ ) than their use at when writing stage ( $M=42.85$ ).

The outcome about the collective use of the strategies indicates that the respondents' overall ESL writing strategy usage is at medium level. This outcome is consistent with that of several existing studies (Chen, 2011; Dumlija, 2018; Maarof& Murat, 2013; Xiao, 2016). All these studies (including the present one) used the questionnaire by Petric and Czarl (2003). Whereas, the focused population of Maarof and Murat (2013), Xiao (2016) and Dumlija (2018) was upper secondary school learners; the population of Chen (2011) was college learners; and the population of the current research was university learners. However, the educational culture of all these studies (including the present one) followed the product-oriented approach for teaching.

As far as the use of ESL writing strategies during each writing process is concerned, the comparison of the mean scores of each writing phase (refer to table 4.4) shows that the respondents employ more strategies at When Writing phase than other two phases. Although Before Writing and Post Writing ESL strategies have strong impact on the learners' writing achievement (Chen, 2011) and the use of these strategies is a characteristic of the skilled writers (Abdullah, 2009; Xiao, 2016; Yang, 2002). However, the students of COMSATS University Lahore studying ECC course are not good in using strategies of these writing phases. In other words, the students become more attentive towards a writing task when they actually start to

compose their piece of writing and thus, they use more ESL writing strategies that may help them to compose a better written task.

This outcome is consistent with several existing studies conducted in different other contexts (Chen, 2011; Dumlija, 2018; Maarof& Murat, 2013; Xiao, 2016). Perhaps, the respondents are not aware of the usefulness of the strategies at Before Writing and Post Writing phases. Dumlija (2018) has stated that the less use of ESL writing strategies at these two phases may be the result of the shortage of time that is allocated to the learners to complete their ESL writing task.

Now, the use of Total ESL writing strategies is concerned, the descriptive statistical results presented in the Table reveal that the learners of COMSATS University Lahore campus use the when revising strategies at the high level as mean score and standard deviation show ( $M=45.28$ ;  $SD=9.79$ ).

This result is also at par with some of the existing studies (Chen, 2011; Dumlija, 2018; Maarof& Murat, 2013; Xiao, 2016). As far as Pakistani context is concerned. This result of the present research does not match with that of Haider (2012a) in his qualitative study conducted in the Pakistani context. He found that all respondents of his study used revising ESL strategies more than pre-writing ones; whereas, the present study explored that the participants used planning strategies more than the revising ones. The difference between the results may be because of the two reasons. The first one is that the outcome of the current study is based on the students' self-reporting about their ESL writing strategy usage; whereas, the findings of Haider (2012a) are mostly based on his observation of the participants' ESL writing processes.



Furthermore, another reason may be that the respondents of this study were the university ESL learners; whereas, the participants of Haider (2012a) were college ESL learners.

The results of the most commonly used strategies have been analyzed in (Table 4.7). Thus, the results analyzed in (Table 4.7) indicate that the when writing strategies are most frequently used by the learners. The learners of COMSATS university Lahore campus become the most conscious when they start writing their composition. When they are writing some text, they carefully formulate the sentences and focus on the grammatical structures.

Some of these most commonly employed strategies (refer to Table 4.7) by the students of COMSATS university Lahore campus match with the strategies employed by the Chinese learners of senior upper school (Xiao, 2016), the Malaysian learners of senior upper school (Maarof& Murat, 2013), the learners of Grammar school of Osijek (Dumlija, 2018), and the EFL Egyptian learners (Gibriel, 2019). For example, at when Writing Stage, “I start with the introduction” is the most commonly used ESL writing action by the Chinese school learners, the Osijek Grammar school students, and the Egyptian students. Similarly, the other most commonly used strategy at this writing phase “I stop after each sentence to read it again” is most usually used by the Chinese, Malaysian, and Osijek learners as well. At When Writing phase, the most frequently used writing strategy by COMSATS learners “start with the introduction” has also been found as the most frequently used one in all of the above-mentioned studies. Similarly, “reread to get ideas to continue” is also employed by the Malaysian and Osijek learners at high level. Consciousness about “grammar and vocabulary” is also most commonly employed strategy by the Chinese ESL learners. “Simplification of ideas” and using “similar English words” are most usually employed strategies by the Chinese and Osijek learners. At Revising

stage, “revising requirements” and “checking mistakes after getting feedback” also match with the most frequently used strategies of all of the above cited studies.

In the Pakistani context, the outcome of the most frequently used ESL writing strategies of the present study somewhat matches with that of Haider (2012a) in his qualitative study conducted in the same context. Both of the studies indicated that the Pakistani ESL learners are very much conscious about the accuracy and superficial makeup of their English compositions. They want to make sure that their English compositions are accurate in terms of lexis and syntax. The students’ use of writing strategies seems to have influence of the teaching method of Pakistani educational system. Pakistani educational system is mostly based on product-approach of writing that targets only the finished product and where grading is based on the accuracy of the writing task (Haider, 2012b, 2012c). Due to this reason, the students most frequently use those ESL writing strategies that ensure the accuracy of their English compositions such as following teachers’ requirements at Planning and Revising stages, making sure that their English compositions are free of lexical and grammatical mistakes along with checking of mistakes after getting the feedback from teachers.

The findings of the least frequently used strategies have been analyzed in (refer to Table 4.7). Thus, the results analyzed in (Table 4.7) reveal that the students of COMSATS University Lahore campus use some strategies at low level. The participants neither uses time management strategy nor do they make outline in their native language at the Planning stage (before writing strategies). However, Hamin and Abdul Hameed (2006) suggest that making use of native language in order to generate ideas may help in improving quality and quantity of the ESL texts. Furthermore, they do not have the habit of reading their written task aloud after completing the writing process. They do not consult dictionary during revision process to make any changes in

the vocabulary. Although they sometimes change and edit the vocabulary of their completed writing task at Revising Stage, but they do not consult dictionary for this purpose at this stage. It indicates that they rely on their existing knowledge rather than other sources. Moreover, the students' responses show that a majority of the students is satisfied with the structure and content of their essays, i.e., they neither change the content nor the sequence of their ideas. In the same way, they are satisfied with the first draft of their essay and do not feel the need of discarding their completed written assignment to write a new one. It is because the ESL students of COMSATS University Lahore Campus use the when writing strategies.

Furthermore, there is no ESL writing strategy at When Writing stage that is used by the students at low level of strategy usage. It implies that the students are comparatively better in using When Writing strategies. It also confirms the results that have been presented in in the (Table 4.6) that the students use writing strategies at When Writing stage more frequently as compared to the other two stages.

Some of the least commonly used ESL writing strategies (Table 4.6) used by the learners of COMSATS university Lahore campus match with the writing strategies used by the learners of Grammar school of Osijek (Dumlija, 2018) and the techniques employed by EFL Egyptian learners (Gibriel, 2019). For example, "writing notes or outline in native language" at Before Writing stage, "drop first draft and start writing again" and " I give myself reward after completing the assignment" at Revising stage are also the least used writing strategies of the learners of Osijek.

Thus, these findings indicate that for the students of COMSATS Lahore, writing process is not a straight process (Flowers & Hayes, 1981) in which the writer first makes a complete plan

about writing, starts writing, and then revises it. Although the writers make plan about what and how to write during Planning stage by using the strategies of making outlines and thinking about what they want to express through their written expression, but they also try to generate more ideas during When Writing stage. This is when they frequently use the strategy of rereading what they have written before. Similarly, they continue to edit and change during the whole writing process. This is when they edit their outline during the When Writing stage and stop after writing one sentence or after writing some sentences to read again. Hence, these results confirm the writing process model given by Flowers & Hayes (1981). The model states that any process of writing consists of three stages: planning (deciding the aims that helps to achieve the output), translating (actual writing) and reviewing (changing and editing). These practices are not linear steps in the light of the fact that essayists consistently screen their composition and move to and from among these exercises (Flowers & Hayes, 1981).

However, this result does not match with the findings of Haider (2012a) where it has been indicated that the respondents of the study used ESL writing strategies in a linear manner rather than a recursive manner. Again, the difference between the findings may be because of the two reasons. The first one is that the outcome of the present study is based on the students' self-reporting about their ESL writing strategy usage; whereas, the findings of Haider (2012a) are mostly based on his observation of the participants' ESL writing processes. The second reason may be that the respondents in this study were the university ESL learners in contrast with the participants of Haider (2012a) who were the college ESL learners. As a result, students of the COMSATS University Lahore Campus follow up only the When Writing Strategies in process of writing texts. They stop to see whether there is no mistake in their text. They do this after a

sentence or after completing the whole paragraph. They become more conscious during the process of their writing texts. They use syntactic rules and semantic skills at the writing stage.

### **5.1.3 Research Question 3**

Is there any significant correlation between ESL learning styles and ESL writing strategies?

The third objective of the present study was to trace the correlation of ESL learning styles and ESL writing strategies. To fulfill this purpose, the related data has been analyzed in (Table 4.8). The outcome suggested a significant positive correlation between ESL learning styles and ESL writing strategy usage. It means that the respondents' ESL learning styles usage effect their use of ESL writing strategies. In other words, every ESL learning style is positively correlated with the different ESL writing strategies. The correlation makes it sure which learning style is highly positive with ESL writing strategies at each stage like 'before writing stage'; when writing stage and when revising stage.

According to the table (4.8), the results of the correlation between ESL learners' learning styles and writing strategies. ESL learning styles have highly correlated with the ESL writing strategies as the 2 tailed Pearson correlation' values indicate ( $r=.295$ ,  $p=.027$ ). According the values of the pearson correlation the pearson coefficient and significant value meet the criteria of the strong correlation. So, the ESL learners' writing strategies are affected by their ESL learning styles at the university level.

Table (4.9) reveals that the students' visual ESL learning style is positively correlated with Before ESL Writing strategies as correlative coefficient shows the following values ( $r=.190$ ;  $p=.038$ ), at the when writing stage, the visual learning style of the ESL learners is also positively correlative with as the value of pearson correlation coefficient indicates as ( $r=.121$ ,

$p=.030$ ), ESL learners' visual learning style is positively significant with the when revising writing strategies as the results show ( $r=.144$ ;  $p=.019$ ). Like the visual learning style of the ESL learners, auditory learning style of the respondents is also highly significant with the writing strategies. Auditory learning style at the before writing strategies is positively correlated in the response of the students as the values show ( $r=.164$ ;  $p=.045$ ). Similarly, auditory learning style of the ESL learners at the use of when writing strategies shows positive correlation as the correlation coefficient shows ( $r=.006$ ;  $p=.035$ ). Finally, the auditory learning style of the ESL learning style with respect to when revising strategies also has correlated positively as the values indicate ( $r=.194$ ;  $p=.025$ ).

With respect to kinesthetic learning style of the ESL learners, there is also a significant correlation with the ESL writing strategies. The results show that the kinesthetic learning has positive correlation with ESL writing strategies at the stage of before writing ( $r=.120$ ;  $p=.042$ ), at the stage of when writing the correlation with kinesthetic learning style is also bounded positively with each other as the correlation coefficient shows ( $r=.130$ ;  $p=.026$ ) and the correlation between kinesthetic and when revising writing strategies is also significant as ( $r=.296$ ;  $p=.014$ ). Similarly, the tactile learning style of the ESL learners also has a correlation with ESL writing strategies. The correlation at the stage of before writing strategies is also significant because the values show ( $r=.322$ ;  $p=.022$ ). The correlation of tactile learning style at the when writing strategies is ( $r=.198$ ;  $p=.065$ ) so there is no correlation because  $p > .05$  and in the same way tactile learning style at the revising strategies has no correlation because the value of  $p$  is greater than the required values ( $r=.297$ ;  $p=.089$ ).

Group learning style also correlates with the ESL writing strategies. So, the group learning style has the positive correlation with before writing strategies as the results show

( $r=.155$ ;  $p=.031$ ). The correlation between group learning and when strategies is positive ( $r=.170$ ;  $p=.041$ ) and at the stage of when revising the correlation between the group learning style and writing strategies is also significant because the correlation coefficient and p values is as ( $r=.139$ ;  $p=.034$ ). Moreover, the individual ESL learning style also has the positive correlation with the ESL writing strategies at the three stages of writing. There is positive correlation at the before writing stage as the values show ( $r=.100$ ;  $p=.24$ ), at the when writing stages, the ESL individual leaning style also make a correlation at the when revising strategies as the values of correlation coefficient and significant value show ( $r=.105$ ;  $p=0.021$ ).

# CHAPTER 6

## CONCLUSION

This chapter comprises the overall summary and conclusion of the study. The summary and conclusion have been presented in accordance with the aims or the research questions of the study.

### 6.1. Research Summary

Firstly, the study was concerned to figure out the ESL learning styles (visual learners, auditory learners, kinesthetic learners, tactile learners, Individual learners and Group learners) and ESL writing strategies (before writing, when writing and revising stage) used by Pakistani ESL learners of COMSATS University Lahore campus during ESL learning and writing process. Correlation has been conducted between ESL learning styles and writing strategies. To fulfill this aim, 200 sampled respondents filled the ESL writing strategy questionnaire devised by Petric and Czarl (2003). To know different ESL learning styles of the students Reid's (1984) Perceptual Learning Style Preference Questionnaire has been used to collect data. To analyze the acquired data, statistical software SPSS was employed. The outcome revealed that the learners use ESL writing strategies of each writing stage different and frequent one is the when writing strategies. Tactile learning style of the ESL learners is close to the kinesthetic learning style as the results show that kinesthetic and tactile learning styles are running pace to pace as the mean score of tactile is  $M=10.44$ ;  $SD=2.83$ ). Therefore, the students of the COMSATS University Lahore are found using different types of learning styles in their learning L2. So, some of the findings are



similar with the previous studies as tactile and kinesthetic learning styles are frequently used in the previous studies Mohammad and Rashid (2013). But the respondents of this study are the most users of the visual and auditory learners.

Whereas, they use more ESL writing strategies at When Writing stage followed by Before Writing stage and Revising stage. As far as the use of total ESL writing strategies is concerned, findings reported that the students are moderate strategy users. The detailed analysis of the most commonly and the least commonly employed ESL writing strategies at each writing stage revealed that ESL writing strategies are most commonly used by the learners of COMSATS Lahore campus. The most frequently used strategies at Before Writing stage are “reading the requirements” and “making a mind plan”. The most frequently used strategies at When Writing stage are to take “start with introduction”, “rereading to continue”, “making sure of grammar and vocabulary mistakes”, “simplifying ideas” and “using synonyms”. The most frequently used strategies at Revising stage are “revision after completing assignment”, “checking requirements” and “checking mistakes after receiving feedback from teachers”. At Before Writing stage, the least used ESL writing strategies are “making timetable” and “writing outline in native language”. At When Writing Stage, the students used them at the most level. At Revising stage, the least frequently used ESL writing strategies are “reading text aloud”, “making changes in contents or ideas”, “using dictionary”, “making changes in structure of the essay”, “I give myself a reward after completing the assignment” and “discarding the written assignment to write it again”.

## **6.2. Limitations and Recommendations for Further Research**

This study has investigated the relationship of ESL learning styles and writing regarding Pakistani university learners. Further research in this area is strongly suggested on the basis of

the following recommendations that may assist in English language learning and teaching. The present research has been carried out in a specific setting. The researcher has limited the scope of the research to the university students only. This study is only deals with learning styles as well as writing strategies of ESL learners in Pakistani universities context. This study deals with the analogy of learning styles as well as writing strategies of ESL learners based on close ended questionnaire survey study.

Future researchers may conduct the same study in some other context or setting. The investigation may be carried out on school or college students in future. Moreover, as the researcher was a student of COMSATS University Islamabad, Lahore campus, the study sample comprised the participants only from this university. It was comparatively smaller sample size, more researchers can be done on a larger scale for more accuracy of the findings furthermore, future studies comprising diversified samples of students from different universities are recommended to be conducted. The study has indicated a facilitative effect of ESL learning styles regarding ESL writing strategy usage. However, this study is based on the close ended questionnaires but further researches may be carried out to get significant information about the causes of this facilitative effect by conducting interviews.

Furthermore, the present study has investigated the relationship of ESL learning styles and writing strategies used by the students of COMSATS University Lahore-Campus. However, future researchers may investigate this relationship regarding other skills of English language.

### **6.3 Pedagogical Implications**

Regarding with ESL learning, teachers must see the learning styles of students for an effective learning. Sometimes, it is problematic for the teachers as well as for the student in

learning process because the teachers are unaware how to teach the low learning students. Every student adopts different learning style.

On the behalf of writing strategies, the teachers should give attention to improve the students' ESL writing strategies usage. They should start some strategy training activities in order to ensure more and more strategy usage as it will have good impact on the students' performance (Abdullah, 2009; Angelova, 2000; Raoofi et al., 2014). Specially, the strategies of more lacking areas i.e., Planning and Revising stages deserve more attention as they have strong impact on students' writing achievement (Chen, 2011). The learners must be motivated to use planning strategies like making a time table and writing the words or short notes relevant to the topic that will help them to brainstorm and having plenty of ideas to write about the topic. Teachers should motivate the learners to build-up the habit of making an outline before writing. It will enhance the quality and quantity of their writing task (Khalid, 2011). It will also help to arrange their ideas related to their topic and they will be able to compose a well-organized and structured essay. Similarly, teachers should also implement strategy training activities to ensure more strategy usage during Revising stage.

It has already been discussed that the students' use of ESL writing strategies seems to be influenced by Pakistani educational system that mostly focuses on the accuracy of superficial makeup of students' written task. So, there is a need to make changes in this teaching approach. The focus should not be on product approach. Instead, the process approach of ESL writing should be emphasized. Teachers should be mindful of the difficulty areas of their students while they are writing compositions in English which is their second language. For this, they may use think- aloud protocols to know what their students actually think and what type of difficulties they face. They should allow them to make use of the writing strategies that are most suitable

and useful for the improvement of their English writing texts.

The individual strategies that are used by the students at low and average level need special emphasis. Specially, the use of social strategies such as seeking help from others while facing any difficulty during writing should be maximized. Moreover, teachers should ask them to memorize some frequently used words and sentence structures so that they may use them when find themselves not able to convey their thoughts in English (Hou, 2011). Teachers should act as the facilitators and supporters. Teachers should not focus on product approach of writing, i.e., grades should not be awarded on the basis of the end-product. Instead, the writing process should be emphasized. Learners' errors should be tolerated and positive feedback should be provided to students. Teachers should perceive the psyche of the student that with which ESL style the student can learning the language properly and should give the tips to write the text and composition during the writing process when mostly students forget the learnt texts.

## REFERENCE

- Abas, I& Aziz, N. (2016). Classification of L2 writing process and writing strategies. *International Seminar on Generating Knowledge through Research*, 1, 367-380.
- Alqunayeer, H. S., & Zamir, S. (2015). Identifying learning styles in EFL classroom. *International Journal of Learning and Teaching*, 1(2), 82-87.
- Al-Saud, L. M. S. (2013). Learning style preferences of first-year dental students at King Saud University in Riyadh, Saudi Arabia: influence of gender and GPA. *Journal of dental education*, 77(10), 1371-1378.
- Aqel, F., & Mahmoud, S. (2005). Learning Styles of An-Najah National University Students in Learning English as a Foreign Language. *An-Najah University Journal for Research-B (Humanities)*, 20(2), 597-624.
- Arndt, V. (1987). Six writers in search of texts: A protocol-based study of L1 and L2 writing. *ELT journal*, 41(4), 257-267.
- Baker, W., & Boonkit, K. (2004). Learning strategies in reading and writing: EAP contexts. *RELC journal*, 35(3), 299-328.
- Bloom, M. (2008). Second language composition in independent settings: Supporting the writing process with cognitive strategies. *Language learning strategies in independent settings*, 33.
- Chamot, A. U. (2005). Language learning strategy instruction: Current issues and research. *Annual review of applied linguistics*, 25, 112-130.
- Chen, Y. (2011). Study of the writing strategies used by Chinese non-English majors. *Theory and practice in language studies*, 1(3), 245-251.

- Claxton, C. S., & Ralston, Y. (1978). Learning Styles: Their Impact on Teaching and Administration. *AAHE-ERIC/Higher Education Research Report* No. 10, 1978.
- Fahim, A., Rehman, S., Fayyaz, F., Javed, M., Alam, M. A., Rana, S., ... & Alam, M. K. (2021). Identification of Preferred learning style of medical and dental students using VARK questionnaire. *BioMed Research International*, 2021.
- Fleming, S., Mckee, G., & Huntley-Moore, S. (2011). Undergraduate nursing students' learning styles: A longitudinal study. *Nurse education today*, 31(5), 444-449.
- Flower, L., & Hayes, J. R. (1981). A cognitive process theory of writing. *College composition and communication*, 32(4), 365-387.
- Garland, D., & Martin, B. N. (2005). Do gender and learning style play a role in how online courses should be designed. *Journal of interactive online learning*, 4(2), 67-81.
- Haider, G. (2012). What the Pakistani L2 writers do when they write: An investigation of the composing processes of Pakistani L2 writers. *Rome, Italy 2012*, 171.
- Hamzah, L. M., Sueb, R., Alias, N. F., Mustafa, S. M. S., & Yusof, M. M. M. (2022). Motivation in Learning: A Case Study of Young Adult Learners in Kuala Selangor, Malaysia. *Asian Journal of University Education*, 18(2), 469-476.
- Najarkolai, A. R., Beigzadeh, A., Motlagh, M. K., & Sabzevari, S. (2015). The relationship between learning styles and baseline characteristics of postgraduate students at Kerman University of Medical Sciences During 2013-2014. *Thrita*, 4(2).

- Jamian, L. S., Samah, A. A., & Aziz, N. A. (2022). Learning Styles and Motivations in Learning English amongst English as Second Language Foundation Students at a Public University in Selangor, Malaysia. *Asian Journal of University Education (AJUE)*, 18(4).
- Kara, S. (2009). Learning styles and teaching styles: A case study in foreign language classroom. *In Conference of the International Journal of Arts and Sciences* (Vol. 1, No. 20, pp. 77-82).
- Kharb, P., Samanta, P.P., Jindal, M. & Singh, V. (2013). The learning styles and the preferred teaching learning strategies of first year medical students. *Journal of Clinical and Diagnosis Research*, 7(6), 1089–1092.
- Krapels, A. R. (1990). An overview of second language writing process research. Barbara Kroll (Ed.). *Second Language Writing. Research Insights for the Classroom*.
- Kroll, B. (1978). Cognitive egocentrism and the problem of audience awareness in written discourse. *Research in the Teaching of English*, 12, 269-281.
- Kroll, B. (Ed.). (2003). *Exploring the dynamics of second language writing*. Cambridge University Press.
- Maarof, N., & Murat, M. (2013). Writing strategies used by ESL upper secondary school students. *International Education Studies*, 6(4), 47-55.
- Maharani, S., Fauziati, E., & Supriyadi, S. (2018). An investigation of writing strategies used by the students on the perspective language proficiency and gender. *International Journal of Multicultural and Multireligious Understanding*, 5(5), 185-190.

- Marcy, V. (2001). Adult learning Styles: How the VARK© learning style inventory can be used to improve student learning. Perspective on Physician Assistant education. *Journal of the Association of Physician Assistant Programs*, 12 (2), 1–5.
- Mastan, M. E. B., Maarof, N., & Embi, M. A. (2017). The effect of writing strategy instruction on ESL intermediate proficiency learners' writing performance. *Journal of Educational Research and Review*, 5(5), 71-78.
- Mastan, M. E. B., Maarof, N., & Embi, M. A. (2017). The effect of writing strategy instruction on ESL intermediate proficiency learners' writing performance. *Journal of Educational Research and Review*, 5(5), 71-78.
- Mu, C., & Carrington, S. (2007). An investigation of three Chinese students' English writing strategies. *TESL-EJ: The Electronic Journal for English as a Second Language*, 11(1), 1-23.
- Mulalic, A., Shah, P. M., & Ahmad, F. (2009). Perceptual learning styles of ESL students. *European journal of social sciences*, 7(3), 101-113.
- Naserieh, F. (2009). The Relationship between perceptual learning style preferences and skill-based Learning Strategies. Unpublished Master dissertation TEFL, Department of English, Shahid Beheshti University Tehran Iran.
- Nikoopour, J., & Khoshroudi, M. S. (2021). EFL Learners' Learning Styles and Self-regulated Learning: Do Gender and Proficiency Level Matter? *Journal of Language Teaching and Research*, 12(4), 616-623.



- O'Malley, J. M., & Chamot, A. U. (1990). Learning strategies in second language
- Olivares-Cuhat, G. (2002). Learning strategies and achievement in the Spanish writing on preferred learning style among business students". *Journal of Oxford: Oxford University Press*.
- Peacock, M. (2001). Match or mismatch? Learning styles and teaching styles in EFL. *International journal of applied linguistics*, 11(1), 1-20.
- Penuelas, A. B. C. (2012). The writing strategies of American university students: Focusing on memory, compensation, social and affective strategies. *Elia*, 12(1), 77-113.
- Petrić, B., & Czár, B. (2003). Validating a writing strategy questionnaire. *System*, 31(2), 187-215.
- Peyman, H., Sadeghifar, J., Khajavikhan, J., Yasemi, M., Rasool, M., Yaghoubi, Y.M... & Karim, H. (2014). Using VARK approach for assessing preferred learning styles of first year medical sciences students: A survey from Iran. *Journal of Clinical and Diagnostic Research*, 8(8), GC01-GC04.
- Rahman M.A., Embong, M., & Amar, A. (2011). Writing strategies of Malaysian ESL undergraduate engineering learners. *International Journal of Engineering & Technology IJET-IJENS*, 11 (2), 1-11.
- Raimes, A. (1991). Out of the woods: Emerging traditions in the teaching of writing. *TESOL Quarterly*, 25(3), 407-30.
- Rao, Z. (2002). Chinese students' perceptions of communicative and non-communicative activities in EFL classroom. *System*, 30(1), 85-105.

- Raofi, S., Chan, S. H., Mukundan, J., & Rashid, S. M. (2014). Metacognition and Second/Foreign Language Learning. *English Language Teaching*, 7(1), 36-49.
- Reid, J. (1987). "The Learning Style Preferences of ESL Students". *RELC Journal*, 35(3), 299-328.
- Sasaki, M. (2002) Building an empirically-based model of EFL learners' writing processes. In second language grammar and writing performance. Unpublished doctoral dissertation,
- Silva, T., & Brice, C. (2004). Research in teaching writing. Annual Review of Applied Students at Gazi University. A Master Thesis. Middle East
- Tai, F. M. (2013). Adult EFL students' preferred learning styles and motivation. *The Journal of Human Resource and Adult Learning*, 9(2), 161.
- Wen, Xu. (2011). Learning styles and their implications in learning and teaching. Theory and Practice in Language Studies, 1(4), 413–416.
- Xiao.H. (2016). Writing strategies of Chinese EFL senior high school students (Masters thesis). Retrieved from <http://studentsrepo.um.edu.my/6485/4/xiao>.
- Yang, H. C., & Plakans, L. (2012). Second language writers' strategy use and performance on an integrated reading-listening-writing task. *Tesol Quarterly*, 46(1), 80-103.
- Yang, S. X. (2002). The difference between successful writers and unsuccessful writers in strategy use. *Foreign Language World*, 89(3), 97-110.
- Yaniafari, R. P., Rihardini, A. A., & Wiradimadja, A. (2021). Undergraduates' Perception on Their English Learning Process: Preliminary Step toward" Foundations of Social

Studies" CLIL-Based Material Development. *Asian Journal of University Education*, 17(4), 49-59

Zakaria, N., Jasman, N. H., Mokhtar, M. I., Nur Alyani Khairol Anuar, D. R. M. Y., & Ibrahim, N. (2022). Exploring Student's Communication Strategies Through Different Learning Styles. *International Journal of Academic Research in Business and Social Sciences*, 12(8), 1908 – 1923.

Zamel, Vivian. "The composing processes of advanced ESL students: Six case studies." *TESOL quarterly* 17, no. 2 (1983): 165-188.

# Appendix A

## Reid's (1984) Perceptual Learning Style Preference Questionnaire

Name: Roll:	Department:
Institution:	Class:

SA= strongly agree, A= agree, U= undecided, D= disagree, SD= strongly disagree

		SA	A	U	D	SD
	<b>Visual Learners</b>					
1	I learn better by reading what the teacher writes on the board.					
2	I highlight the text in different colors when I read.					
3	I understand better when I read instructions or information.					
4	I learn better by reading than by listening to someone.					
5	I learn more by reading textbooks than by listening lectures.					
	<b>Auditory Learners</b>					
6	When the teacher tells me the instructions, I understand better.					
7	When someone tells me how to do something in class, I learn it better.					

8	I remember things I have heard well than things I have read					
9	I prefer listening to the lecture in class.					
10	I learn better in class when I listen to someone rather than participate in it.					
	<b>Kinesthetic Style</b>					
11	I prefer to learn by doing something in class.					
12	I concentrate better when I move around (e.g., pacing or my tapping feet).					
13	I prefer hands-on activities to learn better (e.g., experiments, etc.).					
14	I understand things better in class when I participate in role-playing.					
15	When I speak, I move my hands a lot to express myself better.					
	<b>Tactile Learners</b>					
16	I learn more when I can make a model or graph of something.					
17	I learn more when I make something for a class project (e.g., posters, flashcards, etc.).					

18	I learn better when I make drawings as I study.					
19	When I build something, I remember what I have learned better.					
20	I usually draw diagrams or charts of important points when I study.					
	<b>Group Learners</b>					
21	I get more work done when I work with others.					
22	I like discussion in class and group projects					
23	I love to share my ideas with my classmates.					
24	I enjoy working on an assignment with two or three classmates.					
25	I prefer to study with others because only then I remember things better.					
	<b>Individual Learners</b>					
26	When I study alone, I remember things better.					
27	I like to think on my own before listening to others.					
28	In class, I work better when I work alone.					

29	I prefer working on projects by myself.					
30	I prefer my own ideas when I solve problems.					

# Appendix B

## 1. GENERAL QUESTIONS

1. Gender (please circle): F            M

2. What is your native language? -----

3. How many years have you been studying English? -----

3. Did you attend a course in English before coming to school? Please circle Y    N

If yes, what was the main focus of the course? -----.

4. What types of texts do you write in English? Please circle. Emails, letters, notes, essays, articles, reports, research papers, creative writing, others: -----.

5 Do you like writing in English? Please circle.

I don't like it at all., I don't like it., I have no feelings about it., I like it, I like it a lot.

Why (not)?

Please encircle the appropriate number

<b>Statement</b>	<b>BEFORE I START</b>	<b>Never</b>	<b>Rarely</b>	<b>Sometimes</b>	<b>Often</b>	<b>Always</b>
<b>No.</b>	<b>WRITING AN ESSAY IN</b>	<b>true</b>	<b>true</b>	<b>true</b>	<b>true</b>	<b>true</b>
	<b>ENGLISH.</b>					



1	I make a timetable for the writing process	1	2	3	4	5
2	Before I start writing, I read the requirements carefully.	1	2	3	4	5
3	I look at a model written by a native speaker or more proficient writer.	1	2	3	4	5
4	I start writing without having a writing or mental plan.	1	2	3	4	5
5	I think about what I want to write and have a plan in my mind but not on paper.	1	2	3	4	5
6	I note down words and short notes related to the topic.	1	2	3	4	5
7	I write an outline of my paper.	1	2	3	4	5

8	I write notes or an outline in my native language.	1	2	3	4	5
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## 2. WHEN WRITING STRATEGY IN ENGLISH...

Statement No.	WHEN WRITING IN ENGLISH...	Never true	Rarely true	Sometimes true	Often true	Always true
1	I start with the introduction.	1	2	3	4	5
2	I stop after each sentence to read it again.	1	2	3	4	5
3	I stop after a few sentences or a whole paragraph, covering one idea.	1	2	3	4	5
4	I reread what I have written to get ideas how to continue.	1	2	3	4	5
5	I go back to my outline and	1	2	3	4	5

	make changes in it.					
6	I write bits of the text in my native language and then translate them into English.	1	2	3	4	5
7	I make sure there is no grammar and vocabulary mistake.	1	2	3	4	5
8	I simplify what I want to write if I don't know how to express my thoughts in English.	1	2	3	4	5
9	If I don't know a word in English, I write it in my native language and later try to find an appropriate English word.	1	2	3	4	5
10	If I don't know word in English, I find a similar	1	2	3	4	5

	English word that I know.					
11	If I don't know a word in English, I stop writing and look up the word in dictionary.	1	2	3	4	5
12	I use a bilingual dictionary.	1	2	3	4	5
13	I use a monolingual dictionary.	1	2	3	4	5
14	I ask somebody to help out when I have problems while writing.	1	2	3	4	5

### 3. WHEN REVISING ...

<b>Statement No.</b>	<b>WHEN REVISING...</b>	<b>Never true</b>	<b>Rarely true</b>	<b>Sometimes true</b>	<b>Often true</b>	<b>Always true</b>
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1	I read my text aloud.	1	2	3	4	5
2	I only read what I have written when I have finished the whole paper.	1	2	3	4	5
3	When I have written my whole paper, I hand it in without reading it.	1	2	3	4	5
4	I use a dictionary when revising.	1	2	3	4	5
5	I make changes in vocabulary.	1	2	3	4	5
6	I make changes in sentence structure.	1	2	3	4	5
7	I make changes in the structure of the essay.	1	2	3	4	5
8	I make changes in the	1	2	3	4	5

	content or ideas.					
9	I focus on one thing at a time when revising (e.g., content, structure).	1	2	3	4	5
10	I drop my first draft and start writing again.	1	2	3	4	5
11	I check if my essay matches the requirements	1	2	3	4	5
12	I leave the text aside and then I can use it in a new perspective.	1	2	3	4	5
13	I show my text to somebody and ask for his/ her opinion.	1	2	3	4	5
14	I compare my paper with the essay written by my friends on the same topic.	1	2	3	4	5

15	I give myself a reward after completing the assignment.	1	2	3	4	5
16	I check my mistakes after I get back the paper with feedback.	1	2	3	4	5