

UNIVERSITI TEKNOLOGI MARA

**AN INVESTIGATION OF
COGNITIVE PROCESS OF
PARAPHRASING IN ACADEMIC
WRITING: A CASE STUDY OF ESL
UNDERGRADUATES IN PAKISTAN**

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Thesis submitted in fulfilment
of the requirements for the degree of
Doctor of Philosophy
(Applied Language Studies)

Academy of Language Studies

January 2026

ABSTRACT

Paraphrasing is a sub-skill of academic writing involving a complex cognitive process that demonstrates comprehension and the ability to reconstruct information in an individual way. In English for Academic Purposes (EAP) courses, this skill is often overlooked, although it plays a critical role in developing academic literacy among students. For ESL Pakistani undergraduates, paraphrasing is cognitively demanding as it requires integrating appropriate vocabulary, constructing new sentence structures, ensuring textual authenticity, and managing challenges such as limited lexical resources, cognitive load, and syntactic complexity. The aim of this study was to investigate the cognitive processes and challenges experienced by ESL undergraduates in paraphrasing academic texts, as well as the factors influencing their use of paraphrasing skills in academic writing. The study addressed three research questions: (1) How do Pakistani undergraduates apply cognitive processes in a writing task? (2) What paraphrasing skills are used by Pakistani undergraduates in academic writing? and (3) What factors influence their use of paraphrasing skills? Using a qualitative case study design, data were collected through Think-Aloud Protocols (TAP), document analysis, semi-structured interviews, and classroom observations involving eight ESL undergraduates from a semi-public business university in Pakistan. The findings revealed that both novice and fluent writers employed cognitive processes such as planning, skimming, translating, reorganizing, and reviewing during paraphrasing. However, they faced challenges related to limited vocabulary, semantic interpretation, and syntactic restructuring. Cognitive stresses such as thought load, anxiety, and working memory constraints also influenced their ability to retain and transform information effectively. The study culminated in the development of a framework of Cognitive Process of Paraphrasing that extends the theoretical models of Flower and Hayes (1981) and Bereiter and Scardamalia (1987) by contextualizing them within the ESL academic writing environment. This framework illustrates the dynamic interaction of planning, translating, and reviewing processes in ESL paraphrasing. The findings hold pedagogical implications not only for students but also for teachers, curriculum designers, and policymakers, by emphasizing the need to integrate explicit cognitive strategy training and scaffolded instruction in EAP curricula.

ACKNOWLEDGEMENT

First and foremost, I am deeply grateful to God for granting me the strength, perseverance, and opportunity to embark on and complete this PhD journey. My heartfelt thanks and sincere appreciation go to my supervisors, Dr. Wan Nazihah Wan Mohamed and Dr. Tg Nur Liyana Tengku Mohamed Fauzi, whose unwavering guidance, insightful feedback, and constant encouragement have been instrumental in shaping my academic growth and research. I am truly fortunate to have been mentored by both of you, and I will always cherish your dedication and kindness throughout this journey.

My deepest gratitude goes to my beloved husband, Omar Zubair, whose steadfast support and belief in me have been my anchor. Thank you for your patience, understanding, and for standing by my side through every challenge and triumph. To my wonderful children, Arzum, Zarak, and Zoya, you are my greatest inspiration. Thank you for your love, for bringing endless joy to my life, and for understanding when I needed to devote time to my studies. This achievement is as much yours as it is mine, and I dedicate this accomplishment to all of you.

I am profoundly thankful to my parents, Dr. Munir Ahmed and _____, for their unwavering encouragement and belief in my dreams. Your faith in my abilities and your constant prayers have been my guiding light. To my siblings, and especially my sister, Dr. Najaf Munir, thank you for being my pillar of support and for motivating me to pursue higher education. Your own dedication to making a difference has inspired me to continue striving for excellence and to believe in the transformative power of education.

Finally, I extend my appreciation to my friends, colleagues, and everyone who has offered their support, encouragement, and kindness along the way. May you all be blessed for your generosity and belief in my journey.

Alhamdulillah.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Writing in academic contexts is not merely the mechanical act of producing text; it is a cognitively demanding process that integrates planning, organizing, and translating thoughts into coherent discourse. It enables students to construct knowledge, demonstrate comprehension, and participate in scholarly dialogue (Hirvela et al., 2016; Graham, 2023). Academic writing, particularly in second-language contexts, requires both linguistic proficiency and higher-order thinking, where writers continuously plan, monitor, and evaluate their ideas. Academic writing also reflects higher-order thinking, requiring writers to integrate ideas from multiple sources through paraphrasing, summarizing, and synthesizing.

Among these sub-skills, paraphrasing plays a pivotal role in demonstrating comprehension and maintaining academic integrity. It allows students to restate information in their own words while preserving the original meaning, reflecting understanding and cognitive engagement with the source text. Paraphrasing is therefore considered a key indicator of cognitive engagement and knowledge transformation, particularly in English for Academic Purposes (EAP) courses where students must interpret, reorganize, and express source material independently (Keck, 2014; Rahmat, 2021).

However, for ESL students, particularly in Pakistan, paraphrasing remains a cognitively challenging task due to limited linguistic resources and inadequate exposure to explicit instruction on writing processes (Rahmat, 2021; Yahia & Egbert, 2023). This difficulty is compounded by the fact that writing instruction in many Pakistani universities still emphasizes grammatical accuracy and plagiarism avoidance over explicit teaching of the cognitive and metacognitive processes that support paraphrasing (Mansoor, 2018; Rahmat, 2021). Consequently, students often struggle to internalize how planning, translating, and reviewing interact during academic writing.

Therefore, this chapter introduces the background and context of the study, highlighting issues related to paraphrasing and cognitive processes in academic writing. It also positions the study within the framework of Cognitive Process Theory (Flower