# Enhancing Postgraduate Students' Reading Skills via the Pedagogy-Andragogy-Heutagogy (PAH) Continuum Training Programme

Gurnam Kaur Sidhu<sup>1</sup>, Du Ruofei<sup>2</sup>, Sofwah Md Nawi<sup>3\*</sup>

<sup>1</sup>Faculty of Education, Languages, Psychology & Music, SEGi University,
Kota Damansara, PJU 5, 47810, Petaling Jaya, Selangor, Malaysia
gurnamgurdial@segi.edu.my

<sup>2</sup>Faculty of Primary Education, School of Education,
Linyi University, China,
duruofei@lyu.edu.cn

<sup>3</sup>Academy of Language Studies, Universiti Teknologi MARA Cawangan Johor Kampus Segamat, Johor,
Malaysia
sofwah@uitm.edu.my

\*Corresponding Author

https://doi.org/10.24191/ajue.v19i4.23985

Received: 10 May 2023 Accepted: 25 July 2023 Date Published Online: 27 November 2023 Published: 27 November 2023

**Abstract**: Reading is often viewed as the foundation of all learning including postgraduate study. It is common for most institutions of higher learning to assume that postgraduate students come equipped with the basic competencies of literacy and the required academic reading skills. Nevertheless, studies have shown that some international students for whom English is a foreign language (EFL) face several challenges in academic reading skills. This study examined how the academic reading skills of a group of postgraduate students can be enhanced through a six-month treatment program referred to as the PAH (Pedagogy-Andragogy-Heutagogy) Continuum which emphasized a methodology that shifted from full dependence to negotiated learning and independence. The study employed a quasiexperimental research design and involved an intact group of 50 postgraduate students studying in a private university in Malaysia, where English is the medium of instruction. Data were collected through pre and post reading comprehension tests, questionnaires and five focus group interviews. Quantitative data were analysed using descriptive and inferential statistics, whilst qualitative data were analysed using thematic analysis. The findings showed that the six-month PAH-Continuum Training Programme enhanced the learners' academic reading skills and gave them the confidence to do well in their postgraduate studies. The findings also implied that the PAH-Continuum Training programme can be utilized as a viable teaching and learning framework to help adult mature postgraduate learners develop basic competencies in postgraduate study.

Keywords: Postgraduate Students, PAH Continuum, Reading Skills

### 1. Introduction

Reading is often viewed as the cornerstone of all learning and it entails a complex process that requires a variety of skills which should ultimately lead to reading comprehension and meaning construction. Thus, reading skills that assess reading comprehension ability have received significant attention from linguistic researchers. As a general indicator of reading achievement, it is broadly associated with acquiring and integrating printed text to derive meaning. In today's technological age

of fast-paced turnover of knowledge and information, a competent scholar needs to be well-equipped with both basic and critical reading skills to be able to sieve through numerous websites and articles before deciding on the required information. Thus, literacy in both digital and reading skills has become the call of the day. Such literacy skills can pose crucial challenges for both EFL (English as Foreign Language) and ESL (English and a Second Language) postgraduate (PG) students who have to read widely in a language that is not their own. They need to master basic reading skills to sieve through voluminous books and countless journals online, which is necessary to succeed in their academic life. Thus, the significance of possessing effective reading skills cannot be underrated for postgraduate students as they need to read efficiently and critically alongside possessing other essential 21st-century digital literacy skills. These challenges at the cognitive level include searching and gathering relevant information, comprehending the texts from multiple resources, and integrating various kinds of information to build up representations of connected sources (Singh, 2019).

Although studies have shown that EFL and ESL learners often face obstacles when applying various reading strategies (Shehata, 2019), little attention has been given to postgraduate students' limited reading skills to help them meet the needs of postgraduate study. This is especially true for EFL and ESL learners studying overseas in a country where English is the primary medium of instruction. There appears to be limited empirical evidence of studies that have addressed postgraduates' reading skills (Sidhu, et al., 2023). This leaves a gap in the current literature in addressing academic reading skills among postgraduate students as most institutions of higher learning (IHLs) often assume that postgraduate students come equipped with the necessary basic competencies in reading and writing before embarking on a PG study program.

Furthermore, Sidhu et al., (2022) and Arias (2015) note that a majority of these EFL and ESL PG students in a university where English is the medium of instruction, often come from countries that lack autonomous learning behaviours This situation is most probably due to traditional teaching approaches and learning environments where they have limited or no exposure to native English speakers or are living in a homogeneous environment where no one is speaking English. The lack of responsibility for their learning or developing into autonomous learners among both EFL and ESL PG students can be viewed as another potential gap in current literature.

As mentioned above, most IHLs often assume PG students come equipped with the necessary skills to succeed in postgraduate study. As a result, it is a common phenomenon in most PG departments where supervisors can often be heard lamenting their PG students' limited competency in both academic reading and writing skills. Though this is also a common scenario at the undergraduate levels, most IHLs do have structured programs to enhance their academic reading and writing skills. On the other hand, most IHLs do not cater for such structured programmes in their PG course and what one can expect are probably short seminars or one-to-three-day clinics.

Therefore, the main aim of this quasi-experimental study was to enhance PG students' academic reading skills via a six-month treatment program referred to as the PAH (Pedagogy-Andragogy-Heutagogy) Continuum Training Programme. This training programme is based on an innovative instructional framework that embodies both formal and informal learning and encourages pedagogy and cybergogy. It also embraces the principles of adult learning since it is meant for working and mature PG students.

This paper presents the findings of one component of a larger study that aimed to build basic competencies among PG students. This paper will however investigate an intact group of PG students' self-perceived and actual level of their reading skills and the effect of the PAH Continuum Training Programme in a bid to enhance their reading skills. The study is guided by the following three main research questions:

- (1) What are postgraduate students' self-perceived performance of their reading skills?
- (2) What are the postgraduate students' actual performance of their academic reading skills?
- (3) What are the effects of the PAH Continuum Training Programme in enhancing PG Students' reading skills?

### 2. Literature Review

In the current higher education setting, the role of reading skills for PG students is more pertinent than ever. As the academic landscape advances with the rapid development of information and the ever-increasing complexity of research, the ability to read critically, comprehend, and synthesize scholarly literature remains fundamental. The following sections elucidate the pivotal significance of enhancing PG students' reading skills through the PAH Continuum Training Programme.

# 2.1 Academic Reading Skills

Reading is a functional skill to understand and utilize textual information for learning purposes, which is often considered elementary and learned. With comprehension being the 'overall goal', reading is treated as perfunctory, especially for students entering IHLs thus leaving them devoid of any form of support (Andrianatos, 2019). However, academic reading is more complex as it requires more focus. Sengupta (2002) defines it as a "purposeful and critical reading of lengthy academic texts for studying specific major subject areas" (p.3). Aligning with 21st-century learning practices, students in IHLs need to master not only the 4Cs-critical thinking, collaboration, creativity, and communication—but also information, technology and media literacy which necessitate academic reading abilities. At the same time, academic proficiency is reflected by a combination of academic reading skills along with oral and written communication abilities, reflective learning, as well as personal and analytical skills. These are all crucial and transferable skills required for students at the tertiary level to be efficient learners (Richard, 2018; Yousefi & Mohammadi, 2016), especially for PG students who need to cope with their tasks and complete their studies successfully within the given duration of time (Sidhu et al., 2023).

For students pursuing a Master's or doctoral degree, they are required to read a vast amount of literature to stay updated with the latest research in their respective fields. With the ever-increasing volume of scholarly articles and specialized texts, PG students must be able to master multifaceted skills that would enable them to critically analyse and evaluate academic texts, identify key arguments, and synthesize information from multiple sources for their writing. Moreover, skilled readers perform better than poor readers and are more efficient in making inferences and allocating cognitive resources than less skilled readers (Hahnel et al., 2018; Haiming & Cheng, 2019). In such environments, strengthening the students' reading skills will help them achieve better improvement in their academic fields.

Nonetheless, Maguire et al. (2020) argue that the role of academic reading is not visibly addressed in academic programmes at the tertiary level. Studies have also shown that PG students face academic difficulties and problems (Sundran et al., 2022; Lacasse et al., 2019) with academic skills, such as reading and writing, often considered poor and below their supervisor's expectations (Priyadarshini et al., 2022; Shehata, 2019; Sidhu et al., 2016). Arieff et al. (2021) meanwhile found that PG students' self-perceived perceptions of their academic skills in reading, writing and research skills were higher than their actual performance. These findings highlight the significance of research in this field of study that PG students may possess minimal reading skills which warrants the need to examine the basic academic reading skills among PG students.

# 2.2 Addressing Reading Skills

The predominant pedagogical approach to teaching reading skills has historically been characterized by didactic instruction, a structured curriculum, and a teacher-centred paradigm, often involving lectures and prescribed readings. Various techniques can be employed to improve students' reading skills in EFL/ESL reading. For instance, the CSR and Jigsaw techniques benefit collaborative and peer learning in groups. Moreover, the Listening-While-Reading (LWR) technique and Personal Reading Logs (PRLs) can assist adult English learners in developing their reading fluency and becoming critical readers. In the meantime, there are many traditional models to teach reading, such as the bottom-up, top-down, and interactive processing models. While these approaches have yielded some positive outcomes in earlier stages of education, their limitations become increasingly evident when applied to the unique context of PG students in the current landscape.

Thus, Li and Zeng (2019) encouraged educators to provide innovative teaching methods, ideas, and materials to improve PG students' academic skills. Sohail (2015) who examined the use of academic reading strategies among undergraduate and postgraduate students at Leeds Metropolitan University found that a significant number of students have ineffective reading strategies apart from poor reading habits. With the advent of technology, traditional classrooms need to be transformed and replaced by more sophisticated and innovative approaches. As current students rely mainly on online texts as the source of information (Hewagodage, 2020; Nawaila et al., 2020), Sain (2022) suggests that the training of new forms of comprehension strategies and instructions would enable students to effectively locate and read information in the digital environment.

Apart from that, to help students cope with the demands of academic reading, self-regulation is important to ensure that they remain motivated to read academic journals and articles (Elizabeth & Ena, 2019). Several studies that were conducted among graduate students in Indonesia (Diasti & Mbato, 2020; Mahardika & Kuswadono, 2022) found that self-efficacy as well as strategies such as enhancing interest in reading and goal-oriented self-talk can help sustain motivation for academic reading. Henceforth this study aimed to examine the effectiveness of an innovative instructional framework to enhance PG students' academic reading skills that not only includes strategy training but also incorporates the PAH continuum teaching and learning philosophy for building autonomous learning skills to sustain motivation.

# 2.3 The PAH Continuum

According to Luckin et al. (2010), the PAH Continuum learning framework emphasizes the learning process. It moves from explicit teaching and learning based on the principles of pedagogy (the study of the methods of teaching) and moves to more negotiated learning based on the principles of andragogy (adult learning theory). Finally, it encourages the development of autonomous learning and self-determined learning based on the principles of heutagogy (the management of learning for self-managed learners).

Blaschke and Hase (2015) add that the PAH Continuum teaching philosophy is a learner-centred approach with theoretical roots in humanism and constructivism and explores how people can learn most efficiently. It embraces an approach whereby the learner moves from pedagogy to heutagogy according to their degree of sophistication. Based on the PAH Continuum learners can be guided to shift from full dependence (pedagogy) to guided independence (andragogy) and finally full independence (heutagogy). The open context model of teaching is created for the post-web 2.0. At its initial pedagogical stage, the teacher is not a facilitator but someone who delivers the confidence to understand the subject and make learners study collaboratively. The goal is to encourage learners to express their preferences because when they can design their own learning activities, they can be deeply involved with the learning process. Below in Table 1 is the outline of the PAH Continuum:

**Table 1.** PAH Continuum Outline (Blaschke, 2012)

Stage	Pedagogy	Andragogy	Heutagogy
Locus of Control	Teacher	Teacher/Learner	Learner
<b>Education Sector</b>	Schools	Adult Education	Research
Cognition Level	Cognitive	Meta-cognitive	Epistemic cognition

Since the outbreak of the COVID-19 pandemic, online learning has become a dominant feature in the teaching and learning process in almost all subjects in all countries around the world. In this study, both instructors and students had to embrace online learning overnight during the pandemic. The third phase of the PAH Continuum training program which was conducted during the pandemic, turned out to be a blessing in disguise. This is because it forced the researchers to include online learning resources in the program for busy adult students which enabled these students to learn on their own and at their own pace. In addition, the third stage of the program (the heutagogical stage) required learners to be resilient, hence there were few face-to-face (F2F) seminars and more individual work so that they could become autonomous self-determined learners capable of taking responsibility for their learning.

# 2.4 Theories Underpinning the PAH Continuum

The PAH- Continuum framework employed in this study to enhance postgraduate students' reading skills involved a gradual transition based on theories of pedagogy, andragogy and heutagogy. This framework is based on theories, such as cognitivism, Krashen's Five Hypotheses, humanism, constructivism and connectivism. Since the development of the program was of English language reading skills among EFL learners, the theory of second language acquisitions put forward by Krashen (1986) in his five hypotheses, namely the acquisition-Learning Hypothesis, the Monitor Hypothesis, the Natural Order Hypothesis, the Input Hypothesis and the Affective Filter Hypothesis, also were taken into consideration. Therefore, the five hypotheses proposed by Krashen can provide many implications for teaching regarding the acquisition, input and output, affective domain, autonomy, and sequence of learning. For instance, Purwati (2022) contends that when applying the PAH Continuum principles, it is vital to create a "climate setting", which means creating a comfortable learning atmosphere, which might affect learners' affective domain. In such a situation Krashen's (1986) hypothesis on the affective filter need to be embraced by instructors so that they keep their students' affective filter low so that learning can be more effective in a non-threatening classroom environment.

In the theory of cognitivism, new knowledge is constructed based on prior knowledge and experience, which supports the principle of self-concept in andragogy. In the theory of adult learning, it is assumed that adults have a competing interest, which is an extension of constructivism principles. It believes that adult learners need to apply effort and meaning in their learning to be effective learners, as well as emphasizing social interaction and collaboration, and they can learn from their peers and community of learning. The theory of humanism suggests that learners are responsible for their learning, and it is their inclination and motivation to learn, and the self-awareness they have of their learning capacities. This will also put them on the path of becoming self-determined learners (heutagogy) capable of taking more responsibility for their learning. This served as a robust theoretical basis for adult learning theory, which assumes that adult learners are self-directed, and possess internal and external motivation and the readiness to learn. Finally, in today's digital learning environment, the theory of connectivism proposes that learning objectives should not be defined before academic interventions, and learners need to find the required knowledge in the networks using the power that technology offers. The above four theories underpinned the PAH Continuum principles used in this study.

### 3. Methodology

This study employed a quasi-experimental research design with a mixed-methods approach. It was conducted at a faculty of education in a private university in Petaling Jaya, Selangor, Malaysia. The private university in this study is referred to as University X and the medium of instruction at this university is English. The study involved an intact group of 50 first-semester EFL and ESL postgraduate students who had embarked upon a postgraduate degree, i.e., a PhD (Education) by research mode.

This group of PG students were in Year Two Semester 2 of their three-year PG study programme and were working on their research proposal. In their first semester, they had completed their main coursework which entailed three courses – namely the Research Proposal and Seminar. Advanced Quantitative Research Methods and Advanced Qualitative Research Methods courses.

Data were collected via a three-pronged approach involving pre-and post-reading comprehension tests, questionnaires and focus-group interviews. The same reading text was employed for both the pre- and post-reading tests. The reading comprehension test was validated by a panel of two language experts. It comprised four reading passages with 30 MCQ questions examining both reading skills such as skimming, scanning, making inferences and drawing conclusions. On the other hand, the study employed two questionnaires (Questionnaire A and Questionnaire B) which examined respondents' perceptions of their reading skills and the implementation of the PAH Continuum in developing learners' basic reading skills. Both questionnaires were similar in all aspects, except that Questionnaire B comprised two more sections which investigated respondents' perception of the implementation of the PAH-Continuum. Five focus group interviews were conducted with volunteers at the end of the six-month PAH-Continuum Training programme. Each group comprised between four to five respondents. According to Merriam (2009), the focus group interview can offer valuable

qualitative data and provide a setting for the relatively homogeneous group to reflect on the questions the interviewer asks. The validity of the instruments was assessed by a panel of three experts while the reliability was obtained via a pilot study with a group of 35 PG students from another faculty at University X. The reliability of the pilot test on the questionnaire recorded a score of 0.92 on the Cronbach's alpha analysis indicating the scales were internally consistent and good. The quantitative data were analysed using descriptive and inferential statistics, while qualitative data involved thematic analysis. The trustworthiness of the qualitative data was analyzed via procedures such as triangulation and member-checking (Creswell & Creswell, 2018).

This quasi-experiment study implemented the six-month PAH continuum instructional framework to enhance PG students' academic reading skills. The six-month program was implemented following the ADDIE model, which is a leading learning development model often utilized by many professional instructional designers for technology-based teaching.

# 3.1 The Implementation of the Instructional Design

The ADDIE model involves five stages: analysis, design, development, implementation, and evaluation. The first step was to analyse the learners' reading skills via a reading comprehension test. After analysing learners' learning needs, the researchers designed the six-month instructional PAH-Continuum framework to develop the respondents' academic reading skills. This was followed by developing relevant teaching and learning materials. Experienced English language instructors from the private university conducted the six-month PAH-Continuum training program in collaboration with the researchers.

Table 2. Implementation of the PAH continuum instructional framework

Stage	Basic Reading Skills	PAH Continuum
		Teaching Principles
1 <sup>st</sup>	- Blended (face-to-face (F2F) seminars and online resources,	Pedagogy
	two offline and one online reading task)	(Explicit teaching)
	- One reflective journal entry	
$2^{nd}$	Blended (two full-day intensive F2F seminars and	Andragogy
	independent work online, one offline and two online tasks)	(Negotiated Learning)
$3^{\rm rd}$	- Self-determined learning (One F2F seminar only, no online	Heutagogy
	resources provided)	(Self-determined learning)
	- Autonomous learning tasks (Scopus indexed journals'	
	reading and two self-chosen reading tasks)	

Table 2 outlines the implementation of the three stages of the PAH Continuum. During the implementation, the trainers ensured a gradual transition of the teaching and learning process that moved from full dependence at Stage 1 (Pedagogy) to more negotiated teaching and learning at Stage 2 (Andragogy) and guided to full independence at Stage 3 (Heutagogy).

Stage One was conducted over five weeks. The first week was for orientation to the program, and each week comprised a one-day face-to-face (F2F) training seminar for approximately eight hours. At Stage 1 (Pedagogical Stage), learners received training for four full-day seminars totalling 32 hours. The training also included online learning independently, as all learners were encouraged to work collaboratively to complete one online task and two in-class (offline) reading tasks.

The same amount of time (32 hours) was also allocated for training during Stage 2 (Andragogy) and Stage 3 (Heutagogy). At both Stage 2 and Stage 3, less time was allocated for F2F seminars with more time assigned for learners to perform online peer and individual learning tasks. At Stage 3, learners were encouraged to learn at their own pace using web-based sources and reflect on their learning via reflective journaling.

The basic reading skills covered over the six-month training program were skimming and scanning, identifying main ideas and supporting details, inferencing, using contextual clues and basic referencing. The learning materials employed at Stage One (Pedagogy) were mainly reading comprehension passages sourced from the MUET (Malaysian University English Test) Reading Test

and IELTS reference books and a few simple journal papers. The learning materials at Stage Two and Three comprised mainly articles from Education Journals. The data collected and analysed from the use of multiple (three) data sources were triangulated before conclusion findings were drawn for the study.

The six-month training was conducted by three lecturers cum trainers who were teaching English as a Second Language (TESL). In this study they were referred to as Trainer A, Trainer B and Trainer C. Trainer A is a lecturer attached to a public university in Malaysia with more than ten years' experience teaching reading at the undergraduate level. Trainer B, from University X has more than 35 years of experience teaching reading at both the undergraduate and postgraduate levels. Trainer C is a professor and has been teaching TESL for close to forty years. Each trainer was involved in leading one stage of the training and assignments. Trainer A was the lead at Stage 1- Pedagogy Trainer B at Stage 2 (Andragogy) and Trainer C for Stage 3 (Heutagogy).

Finally, the study also adhered to ethical considerations in research such as obtaining permission and consent from both University X and the respondents involved in the study. The data collected was also kept in a password-encrypted laptop which was accessible only to the researchers.

#### 4. Results

The following section will highlight the main findings obtained from the three main data collection tools, i.e., Reading Comprehension pre and post-tests, Questionnaires A and B and the five Focus Group Interviews. The findings are presented based on the three main research questions that guided this study.

# 4.1 Demographic Profile of Respondents

The study involved an intact group of 50 EFL and ESL PG students at University X, a private university in Malaysia located in the Klang Valley. Of the 50 participants, twenty (20) or 40% were male, whilst the remaining sixty per cent were females. The respondents' ages ranged between 32 years and 35 years old. Most of them were lecturers and working adults. Thirty-two (32) or 64% of them are single, whilst the rest are married. All of them are pursuing a Ph.D. in education at University X where the medium of instruction at this university is English.

### 4.2 Respondents' Actual Reading Skills Performance

The first research question in this study aimed to examine respondents' reading performance in the following skills: skimming and scanning, identifying main ideas and supporting details, inferencing, using contextual clues and basic referencing. These PG students were required to sit for a reading comprehension test based on four reading passages with 30 MCQ questions. Table 3 shows the results of the respondents' performance in the Pre-Reading Comprehension Test.

**Table 3.** Postgraduate students' actual performance in basic reading skills (pretest)

Item	Mean	SD	
Actual Basic Reading Skills			
1. Overall Skimming and scanning	3.46	.721	
2. Overall Identifying main ideas and supporting details	3.28	.754	
3. Overall Inferencing	3.02	.673	
4. Overall Using Contextual Clues and basic referencing	3.05	.874	
Overall	3.20	.756	

<sup>\*</sup>Scale: 1=Weak, 2= Limited, 3=Fairly, 4= Good, 5= Excellent

As shown in Table 3, the mean rating of the overall actual performance of PG students' reading skills is 3.20 (SD = 0.756), indicating a moderate performance. The results also indicated better performance for skimming and scanning (M = 3.46, SD = 0.721) and identifying main ideas and supporting details (M = 3.28, SD = 0.754). Nonetheless, limited performance was seen in higher-order reading skills such as inferencing (M = 3.02, SD = 0.673), using contextual clues, and basic referencing

(M = 3.05, SD = 0.874). This fair performance revealed that learners needed help with even basic reading skills to succeed in their postgraduate study at the university.

Learners also admitted this moderate performance during the focus group interview sessions. In this study, interviews were with five focus group discussions (Groups A to E). Each group comprised four (4) to five (5) participants (referred to as Respondents 1 to 5). The learners pointed out the difficulties of using the English language to pursue their postgraduate degrees. Many also addressed the importance of reading and consider reading behaviour a measure to overcome obstacles in their academic writing.

'Critical thinking and writing are both very important, but personally, to me, reading is the thing that takes a lot of time because you have to read.' (D2)

'The more I read not only practice to be a critical reader but also can increase my English proficiency through seeing how they structure the sentences and the vocabulary in it.' (R5)

'Work out this... reading. Reading good articles, reading Ph.D. thesis, articles papers and to copy how they construct their ideas.' (R2)

'Yeah, the more you read maybe the better you write.' (R1)

Besides, the participants also expressed their difficulties in academic reading, such as the deficiency in basic reading skills and the weakness of being a foreign language learner.

'Skimming and scanning is one of my weaknesses as I tend to go over it a few more times before I can understand clearly.' (R7)

'In my case, it's like, when I read different articles, I tend to like forgot the main idea behind it. So, I lose count, so I lose focus while I was reading.' (D2)

'I think the most problems are in the listening aspects. And the writing and reading skills also have some problems... I have to read a few times the same article before I can understand and before I can write my proposal.' (B3)

'Compared with all the English native speakers, we, we only read, we take a lot of time and that is time-consuming and takes a lot of our energy too.' (D3)

The above excerpts indicate that most of these PG EFL and ESL learners are still grappling with basic reading skills and admit that they do have to spend a lot of time reading a few times before obtaining a good understanding of journal articles that they are required to read to write a good research proposal.

# 4.3 Effect of PAH-Continuum on Respondents' Reading Skills

Research Question Two in this study investigated the effect of the six-month PAH continuum Training Programme that was designed to enhance PG students' reading skills. The results obtained from the pre-test revealed that the PG students lacked basic academic reading skills. Hence the programme focussed on four academic reading skills which the researchers felt were important to address first before moving on to other more advanced or critical reading skills.

Reading Skills	Post- Test	Pre- Test	Mean difference	t	df	Sig. (2-tailed)
Skimming & scanning	4.52	3.46	1.06	5.61	49	.000
Identifying main & supporting	4.35	3.28	1.07	5.74	49	.000
details						
Inferencing	3.81	3.02	.79	3.51	49	.000
Contextual clues & basic	3.74	3.05	.69	2.85	49	.000
referencing						
Overall	4.11	3.20	.91	4.73	49	.000

**Table 4.** Paired samples *t*-test on reading skills for pretest and post-tests

This study employed the same reading comprehension for both the pre and post-tests. The results are displayed in Table 4. below. From the results, the respondents' overall reading skills performance improved in all the reading skills. They improved their ability to identify main ideas and supporting details, skimming, and scanning. Their ability to inferencing, using contextual clues and basic referencing showed improvement but were still at a fair performance level.

Furthermore, the paired *t*-test revealed an overall significant improvement in their reading skills, which was also recorded for all the reading skills investigated in this study. The overall score of basic reading skills or for each item, their p-value is 0.000, less than 0.01, indicating a significant difference between their actual reading performance after the implementation of the six-month PAH-Continuum training program. This significant improvement in all reading skills shows the effectiveness of the PAH-Continuum Training program in enhancing their academic reading skills. The next section will present the PG students' perception of the training programme.

# 4.4 Respondents' Perceptions of the PAH-Continuum Training Program in Enhancing Their Reading Skills

Research Question Three in this study examined respondents' perceptions of the implementation of the PAH Continuum. Information for this question was obtained from the five focus group interviews and Questionnaire B. Based on the data obtained the thematic analysis provided here will be presented on the respondents' perceptions of the reading skills.

# 4.4.1 Effect of the PAH Continuum Training on Skimming and Scanning Skills

Based on the findings almost all PG students in the five focus groups highlighted that they were now more capable of skimming and scanning articles when surfing the Internet For instance, Participant C1 said: "In this programme, I learned some reading skills like skimming that helps me read fast and take a shorter time to get the main words because, in classes, teachers would tell which words are important and all." (Line No. 55)

Others had the following to express. For instance, Participant C4, said "I think I developed my reading ability the best because it was difficult for me to understand the main ideas of academic papers. However, after this course, I improved and learned effective reading skills." Participant C1 highlighted that "For reading courses, I can identify the general ideas, research problem, solutions, results and such significant parts of research fast when I read."

Likewise, responses from Questionnaire B on the whole pointed out that they could now skim and scan more quickly the main ideas in a text (R23) and a journal article and decide if the article was suitable for their study or not (R15).

<sup>\*</sup>Scale: 1=Weak, 2= Limited, 3=Fairly, 4= Good, 5= Excellent

# 4.4.2 Effect of the PAH Continuum Training on Identifying Main Ideas and Supporting Details

Evidence for improved skills in identifying main ideas and supporting details was also well articulated by PG students in both data sources. For instance, Participant D3 from Focus Group D said "I can read more efficiently, for example, I can quickly find the main idea of the passage and can erase the useless part of the passage." (Line No. 241). Other participants articulated their development in identifying main ideas and supporting details skills similarly. For instance, R3 said that after the programme, she "developed the skill of finding useful ideas". Some reiterated that they "consciously look out and ask myself, questions like 'what the point is here'" (E3) whilst some expressed that 'when reading now we must talk to ourselves and think what is the main idea and what is supporting that idea and I think, this helps us also to become a good reader" (E5).

Data from Questionnaire B also highlighted that PG students were confident in reading journal articles and some expressed their ability 'to pick out the main idea in a literature review' (R12) whilst others like Respondents 6, 9 and 45 said that identifying main and supporting details was a 'useful skill' as it helped them to better understand the article.

# 4.4.3 Effect of the PAH Continuum Training on Inferencing Skills

Data from participants in Focus Group B revealed that PG students expressed the positive effect of the training programme as it helped to improve their inferencing skills. Participant B1 stressed that inferencing is "the skill of reading and applying a concept to other situations" and she "feels though I have improved I think I still need training after the program." She said, "The theory is one thing but applying theoretical knowledge to the life is another thing. I think we lacked the practice." (Line No. 274).

Other data sources showed evidence that PG students appreciate the importance of these skills and R7 highlighted that "inferencing is important when we read, and this makes us think more" while R19 highlighted that she "improved my inferencing skills as I now can do reading between the lines to get the true meaning"

Respondent D4 from Focus Group Four noted that one of her gains was knowing how to "compare the works and the integrate their advantages and disadvantages."

# 4.4.4 Effect of the PAH Continuum Training on Using Contextual Clues and Basic Referencing

The effectiveness of the programme in improving these two skills was not well articulated by respondents probably because they may be using them but did not stress the importance of these two skills. Nonetheless, a few participants expressed the importance of contextual clues in Questionnaire B when R25 highlighted that "using contextual clues in a clever way can help me understand an article better." A few others highlighted that they liked the training on basic referencing and 'how to cite references within my proposal' whilst R2 from Focus Group **Two** reiterated that "how to quote parts is most helpful to me if I clearly guide how to quote other articles so as will avoid that I will produce plagiarism which is very detrimental to the learning process of my PhD."

# 4.4.5 Effect of the PAH Continuum Training on Summarizing and Synthesizing Skills

Almost all the participants in the five focus groups stressed their improvement in summarizing and synthesizing skills. This was also evident in the findings obtained from Questionnaire B. For instance, Participant C3 from Focus Group C said: "It is easier for me to summarize the research articles after attending the programme." (Line No. 284). This was succinctly reiterated by Participant E1 from Focus Group Five and she highlighted that:

"In my opinion summarizing and synthesizing skills are very important when we write a literature review. I think I learned a lot during this training on how to summarize and how to synthesize the information we have read in a few articles and put it into writing when we are writing a literature

review... I know many of my friends also enjoyed this lesson. It has helped all of us... because sometimes our supervisors tell us we are not synthesizing information read but writing summary — so I think in proposal writing we must have the skills of how to summarize when we are reading the journals."

All the above excerpts alongside the quantitative findings indicated that the structured PAH-Continuum training programme did significantly enhance their reading skills in the five reading skills that were investigated. Besides enhancing their reading skills the PG students also provided favourable response to a few other aspects of the training.

# 4.4.6 Effect of the PAH Continuum Training Programme

As mentioned above, a majority of the PG students found the six-month program helpful in enhancing their reading skills. Overall, data from both sources (questionnaire and interviews) revealed that participants viewed the implementation of the PAH Continuum instructional framework in a positive light and highlighted the main learning gains they experienced while attending the PAH Continuum Training programme. They also highlighted the role of facilitators and collaborative learning. Given below are some excerpts that articulate these thoughts.

With regard to the three trainers that were involved in the six-month programme, the PG students overall comments highlighted the strength of the trainers' reading instruction and willingness to help them. They also emphasised that the learning materials and PowerPoint notes shared on Blackboard (online learning platform utilised by University X) was very useful and they could refer to the notes when required. Given below are a few excerpts that support the above finding.

- "Lecturers were very nice to answer our questions and their lectures were very clear as they provided us with many many examples and strategies on how we can improve our reading skills... And that's what I like most." (R2)
- "The teacher's teaching is very planned and professional, covering even the feelings and emotions involved in the reading process especially when we have to read many journal articles and some of us from China sometimes get frustrated because we have to Google Translate almost all passages and some long sentences so I really like the emotional strategies that we can use..." (R4)
- I also like the many learning materials that the lecturers shared with us on Bb (Blackboard).

  . I like their teaching, they went slowly and explain kindly when we do not understand and I like all the trainers." (E4)

Besides that, the respondents also expressed other favourable aspects such as the systematic structure that was provided and the learning tasks. Given below are some of the excerpts taken from focus-group interviews

- "The most important part of learning I think was the last few stages (Andragogy & Heutagogy)... during the pandemic, we were still able to learn in a classroom context digitally where we were able to share our opinions among friends. The online group work also helped us a lot as we were able to talk to our friends and when we work on the same task online on Blackboard we also can learn from each other I like the group work because I learn a lot also from my friends." (C3)
- "It was really a very nice learning journey because as we learn together, we share ideas with our other friends, we share our experiences, even from our countries we try to share things that are happening in relation to research work and everything." (R3)
- "I think this training program is very useful, especially for us Chinese learners. It is not only beneficial to our thesis writing but also to your future academic development as we did learn many new strategies and techniques on how to read academic journals . . It arouses our

concern for academic reading and now we know that reading is very important in doing a PhD." (R5)

• "The thing I like most about it, it shows procedure, a procedure of learning and at the beginning we had many good lessons from the teachers and then we worked in groups and pairs talking about articles and our proposal writing and lastly we had to look and find and read articles for our study on our own – I think it is a good program for me and my friends." (B4)

From their responses, it can be concluded that the students have gained strategies on how they could improve their academic reading skills. They also expressed the advantages of peer online learning which gave them control of what, how and when they wanted to learn and get together online. The above discussion shows that the respondents viewed the six-month implementation of the PAH Continuum training program favourably. More notably, the program significantly enhanced their reading skills and gave them the confidence needed to move forward and complete their PG study.

### 5. Discussion

This study aimed to enhance PG students' academic reading skills performance based on a quasi-experimental design that saw the implementation of a six-month PAH Continuum instructional framework. The first research question revealed that PG students did not perform well on basic academic reading skills before the quasi-experiment. Their levels of all the investigated skills were between the range of fair to good, which is insufficient to complete an academic dissertation at the PG stage. Thus, this warrants that reading skills need to be investigated further in more detail (Ali & Shabbir, 2017; Kilpatrick, 2015).

For the second research question, the findings revealed significant improvement in all reading skills after the quasi-experiment, which indicated the effectiveness of the six-month PAH Continuum instructional framework. There were significant improvements in all four reading skills, but a modest improvement was seen in learners' ability to make inferences and use contextual clues and basic referencing. This finding is similar to findings recorded by Sidhu et al. (2022) and Arieff et al. (2021) who found that PG students' ability to make inferences while reading was rather limited in their study. Similar findings were also noted in a study by Ali and Shabbir (2017) who revealed ESL Learners' limited ability in inferential comprehension skills. Nonetheless, these findings reiterate Maguire et al.'s (2020) call to highlight the importance of academic reading in the development of academic and professional identities.

For the third research question, the researcher integrated data from questionnaires and interviews. Respondents highlighted the program's strengths in its instructional design as it gradually helped them learn autonomously and become more efficient in academic reading skills and reflective thinking. Besides, reflection motivates them to be more engaged in learning. This further validated the findings of a study by Ghanizadeh (2017), which pointed out that reflection significantly impacts academic achievement. In the same vein, the findings resonate with other studies that emphasized the importance of motivation for improving students' academic reading skills (Diasti & Mbato, 2020; Elizabeth & Ena, 2019; Mahardika & Kuswadono, 2022). In addition, participants also expressed satisfaction with the learning procedure in this program, which helped them develop to be learners who can acquire and build upon their knowledge through personal learning environments. At the same time, the finding is consistent with a study by Ekoto and Gaikwad (2015) that adult learners overall experience learning satisfaction in this approach.

During the interviews, participants articulated that after gaining a higher level of basic reading skills, they found it easier to grasp the main idea and find the relevant resources quickly. This is consistent with the findings by Hahnel et al. (2018) that proficient readers are more efficient than poor readers. Participants were also told the rationale of the PAH Continuum teaching framework and found that the teaching procedure was logical. Meanwhile, respondents consider trainers well-planned and very helpful. These factors probably motivated them to take more responsibility for their learning.

Compared with existing studies, this study is different in the following aspects. Firstly, it is a quasi-experimental study that tests learners' basic academic reading skills, not related to their academic performance as other researchers did. Furthermore, this study triangulated the quantitative findings with

qualitative data analysis from reflective journals and interviews, making the results more credible. Thirdly, this study puts forward an alternative teaching framework that is rarely explored. The strategies for applying it included employing both F2F and distance collaborative learning by assigning group work online and offline. It is hoped that in the future this framework can be further developed as a tool for designing and improving other language skills for the adult learner.

#### 6. Conclusion

In conclusion, this study challenges the assumption that PG students inherently possess the necessary language skills and academic competencies for their PG study. It underscores the importance of recognizing and addressing the specific challenges faced by EFL PG students, particularly in academic reading. Therefore, PG supervisors need to examine their students' basic competencies and if required, address their students' fundamental academic skills including academic reading skills. Supervisors or IHLs need to put into place some innovative approaches such as the PAH Continuum that can help transform EFL/ESL PG students from novice readers to proficient readers. Furthermore, since reading skills are viewed as the foundation of all learning, this competency becomes even more critical at the PG level as students need to read a vast amount of literature from previous scholars accurately and skilfully before they can draw conclusions to identify the gap in current literature.

The results of this quasi-experimental study demonstrate that the PAH-Continuum Training Programme, which emphasizes a shift from full dependence to autonomous learning, significantly enhanced the participants' academic reading competencies. This improvement was validated through a combination of reading comprehension tests, questionnaires, and focus group interviews. Furthermore, the study highlights the development of confidence among the participants in their PG studies. This suggests that the PAH-Continuum approach imparts skills and empowers students to ultimately be able to complete their studies on time.

Nonetheless, future studies are necessary to identify the long-term impact of this programme. A longitudinal study would help provide insights into the sustained effects of the training programme. Other than that, comparative studies would be useful to examine students from varying study programmes, levels of English proficiency and even cultural background to determine the PAH Continuum's applicability in different contexts.

Finally, it needs to be acknowledged that this study has some limitations. Firstly, due to the small number of students in the study, the findings may only apply to a specific EFL/ESL population of PG students. Nonetheless, the study has put forward a valuable instructional framework based on the PAH-Continuum that may be expanded to develop other related skills for learners in tertiary institutions to become capable lifelong learners.

To conclude, this study not only highlights the efficacy of the PAH-Continuum Training Programme but also opens avenues for further research and refinement of pedagogical approaches tailored to the unique needs of EFL PG students, ultimately enriching the landscape of PG education.

# 7. Co-Author Contribution

The authors affirmed that there is no conflict of interest in this article. Author¹ conceptualised the study and the training program and oversaw the write-up of the whole article. Author² administered the data collection, carried out statistical analysis and did the data entry. Author³ prepared the literature review and wrote the research methodology and interpretation of the results.

# 8. Acknowledgements

This study is part of a larger study funded by the Ministry of Education, Malaysia under the Fundamental Research Grant Scheme (FRGS/1/2018/SS109/SEGI/01/1).

### 9. References

Andrianatos, K. (2019). Barriers to reading in higher education: Rethinking reading support. *Reading & Writing 10*(1). Retrieved from: https://doi.org/10.4102/rw.v10i1.241

- Arias, X. P. B. (2015). A comparison of Chinese and Colombian university EFL learners regarding learner autonomy. *Revista PROFILE Issues in Teachers' Professional Development VO 17*, 17(1), 35–53.
- Ali, A., Javed, M., & Shabbir, G. (2017). Assessing ESL learners' literal, reorganization and inferential reading comprehension abilities. *Journal of Educational Research* (1027-9776), 20(2).
- Arieff Shamida, Sidhu, G. K., & Nawi, S.M. (2021). Postgraduate students' perceived and actual performance in critical reading skills. *Asian Journal of University Education*, 17(3), 76-84.
- Blaschke, L.M. (2012). Heutagogy and lifelong learning: A review of heutagogical practice and self-determined learning. *The International Review of Research in Open and Distributed Learning*, 13(1), 56-71. https://edtechbooks.org/-pkq.
- Blaschke, L.M. & Hase, S. (2015). Heutagogy, technology, and Lifelong Learning: Curriculum geared for professional and part-time learners
- Chaleta, E., Saraiva, M., Leal, F., Fialho, I., & Borralho, A. (2021). Higher education and Sustainable Development Goals (SDG)—Potential contribution of the undergraduate courses of the School of Social Sciences of the University of Évora. *Sustainability*. 13, 1828. https://doi.org/10.3390/su13041828
- Chankseliani, M., & McCowan, T. (2020). Higher education and the sustainable development goals. *Higher Education*, 81, 1 - 8.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches.* Sage publications.
- Diasti, K. S., & Mbato, C. L. (2020). The role of motivation-regulation in master students' academic reading. *Journal of English Educational Study (JEES)*, *3*(2), 101–109. Retrieved from: https://doi.org/10.31932/jees.v3i2.698
- Elizabeth, E., & Ena, O. T. (2019). Intrinsic and extrinsic motivation of English education graduation students batch 2018 in accomplishing academic performance. IDEAS: *Journal on English Language Teaching and Learning, Linguistics and Literature*, 7(2), 21–31. https://doi.org/10.24256/ideas.v7i2.997
- Ghanizadeh, A. (2017). The interplay between reflective thinking, critical thinking, self-monitoring, and academic achievement in higher education. *Higher Education*, 74(1), 101-114.
- Gkonou, C., & Oxford, R. L. (2019). Teacher education: Formative assessment, reflection and affective strategy instruction. *Learning Strategy Instruction in the Language Classroom*, 213–226.
- Hahnel, C., Goldhammer, F., Kröhne, U., & Naumann, J. (2018). The role of reading skills in the evaluation of online information gathered from search engine environments. *Computers in Human Behavior*, 78, 223-234.
- Haiming, Z. & Cheng, Z. (2019). An empirical study on Chinese EFL learners' critical reading strategies. *Studies in Literature and Language*, 19(2), 59-64.
- Hewagodage, V. (2020). Utilizing Internet resources in TESOL: The design of English language learning and formative assessment practices. In *Technology-Enhanced Formative Assessment Practices in Higher Education* (pp. 60–86). IGI Global.
- Kilpatrick, D. A. (2015). Essentials of assessing, preventing, and overcoming reading difficulties. John Wiley & Sons.
- Krashen, S. (1986). Bilingual education and second language acquisition theory. In California State Department of Education (ed.) *Schooling and Language Minority Students: A Theoretical Framework*. Sacramento, CA: Department of Education.
- Li, J., & Zeng, L. (2019). Investigation into and analysis of the current situation of academic English writing of HLP postgraduates: A case study from a Chinese university. *Journal of Language Teaching and Research*, 10(5), 979-988.
- Lacasse, M., Audétat, M. C., Boileau, É., Caire Fon, N., Dufour, M. H., Laferrière, M. C., & Paquette Raynard, E. (2019). Interventions for undergraduate and postgraduate medical learners with academic difficulties: A BEME systematic review: BEME guide no. 56. *Medical teacher*, 41(9), 981-1001.
- Luckin, R., Clark, W., Garnett, F., Whitworth, A., Akass, J., & Cook, J. (2010). Learner-generated contexts: A framework to support the effective use of technology for learning. In M. Lee & C.

- McLoughlin (Eds.), Web 2.0-based e-learning: Applying social informatics for tertiary teaching (pp. 70–84). Hershey, PA: IGI Global.
- Maguire, M., Reynolds, A. E., & Delahunt, B., (2020). Reading to Be: The role of academic reading in emergent academic and professional student identities, *Journal of University Teaching & Learning Practice*, 17(2). Retrieved from: https://ro.uow.edu.au/jutlp/vol17/iss2/5
- Mahardika, A. A., & Kuswandono, P. (2022). Indonesian graduate students' strategies in regulating their motivation in academic reading. *Journal of English Education and Applied Linguistics*, 11(2), 329–347. https://doi.org/10.24127/pj.v%vi%i.4825
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.
- Nawaila, M., Kanbul, S., & Alhamroni, R. (2020). Technology and English language teaching and learning: a content analysis. *Journal of Learning and Teaching in Digital Age*, 5(1), 16–23.
- Priyadarshini, M., Gurnam, K. S., Hoon, T. S., Geethanjali, N., & Fook, C. Y. (2022). Key factors influencing graduation on time among postgraduate students: A PLS-SEM approach. *Asian Journal of University Education*, 18(1), 51-64.
- Purwati, D., Mardhiah, A., Nurhasanah, E., & Ramli, R. (2022). The six characteristics of andragogy and future research directions in EFL: A literature review. *Elsya: Journal of English Language Studies*.4(1), 86-95. https://doi.org/10.31849/elsya.v4i1.7473
- Pilotti, M.A., & Al Ghazo, R. (2020). Sustainable education starts in the classroom. *Sustainability*. 12, 9573; doi:10.3390/su12229573.
- Richard, C. (2018). 5 academic skills to prepare your Learners for higher education. Retrieved from https://www.english.com/blog/academic-skills-for-higher-education/
- Sain, N. (2022). Incorporating new literacies of online research and comprehension strategies instruction in English as a Second Language (ESL) undergraduate classrooms [Unpublished doctoral dissertation]. University of Tasmania.
- Sengupta, S. (2002). Developing academic reading at tertiary level: A longitudinal study tracing conceptual change. *The Reading Matrix*, 2(1), Retrieved from http://www.readingmatrix.com/articles/sengupta/article.pdf
- Shehata, A. M. K. (2019). Understanding academic reading behavior of Arab postgraduate students. *Journal of Librarianship and Information Science*, 51(3), 814-822.
- Sidhu, G. K., Kannan, S., Arieff Shamida, & Du, R. (2023). Sustaining students' quality learning environment by reviewing factors to graduate-on-time: A case study. *Environment-Behaviour Proceedings Journal*, 8(24), 127-133.
- Sidhu, G. K., Nawi, S. M., Ramakrishnan, K., & Du, R. (2022). Developing PG students' learner autonomy through the PAH-Continuum: A Case Study. *Environment-Behaviour Proceedings Journal*, 7(21), 121-127.
- Sidhu G.K., Kaur S., Lim P.C., & Chan Y.F. (2016) Assessing the critical reading skills of postgraduate students: Perspectives of supervisors and supervisees. In: Tang S., Logonnathan L. (eds). *Assessment for Learning Within and Beyond the Classroom*. Springer, Singapore (p.43-55).
- Singh, M.K. (2019). Academic reading and writing challenges among international EFL master's students in a Malaysian university. *Journal of International Students*, *9*, 972-992.
- Sohail, S. (2015). Academic reading strategies used by Leeds Metropolitan University graduates: A case study. *Journal of Education and Educational Development*, 2(2), 115-133.
- Sundran, D., Sidhu, G. K., & Kannan, S. (2022). Sustaining quality tertiary education via critical reading skills and language learning strategies. *Journal of Positive School Psychology*, 6699-6707.
- Yousefi, S., & Mohammadi, M. (2016). Critical thinking and reading comprehension among postgraduate students: The case of gender and language proficiency level. Journal of *Language Teaching and Research*, 7(4), 802-80.