Postgraduate Students' Perceived and Actual Performance in Critical Reading Skills

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Abstract: The democratisation and commodification of education has witnessed an increase in postgraduate education as it is one of the main sources contributing to the advancement of knowledge, technology, and innovation. However, despite the significant rise in numbers, the returns at both the global and national levels have been low due to high attrition and low completion rates among the students. One among the numerous factors cited has been the postgraduate students' limited competencies in language and research skills. In terms of language, postgraduate students are expected good working knowledge of the English language and be able to read academic literature to possess and write their thesis with acceptable standard of English. Therefore, the main aim of this paper was to assess postgraduate students' perceived and actual performance in critical reading skills. This study involved a total of 50 postgraduate students from a private university in Malaysia. Data for this study were collected using a questionnaire and a reading test based on the Malaysian University English Test (MUET) Reading Examination Paper. The findings revealed that there was a significant difference between the two performances. Students held a higher perception of their ability when compared to their actual performance in critical reading skills. These results indicate that there is a need for innovative approaches to develop postgraduate students' critical reading skills so that they can successfully complete their studies within the given duration and graduate on time.

Keywords: Critical Reading, Performance, Postgraduate Students, Postgraduate Study

1. Introduction

Reading has an impact on a person's intellectual and emotional development. Those who read well have a better chance of broadening their mental horizons and achieving more success in their lives especially in the 21st Century, where individuals will need higher levels of reading literacy to carry out their jobs and perform their personal lives in order to keep pace with the rapid advancement of the world (Baba & Affendi, 2020). Besides, reading is an essential skill for postgraduate studies as it helps the students to develop deeper understanding of their research topics. In postgraduate studies, students need to read large volumes of information from various academic materials such as journals,

books, and articles. Rhead and Little (2020) stated that as academic reading is purposeful in postgraduate studies, postgraduate students need to commit themselves in reading wide range of lengthy academic texts in order to complete the study of specific major subject areas that they are working on. Furthermore, besides reading, they also need to actively engage with all the information that they read, and this is where critical reading skills are needed. The critical reading involves students to select reading materials that are relevant to their study and then, read and evaluate them critically so that the information obtained from the reading can be used in their postgraduate process.

According to Wallace and Wray (2021), critical reading skills are recognised as one of the main pillars in postgraduate studies. Khalil (2019) argued that critical reading is essential for postgraduate students since it helps them provide valid arguments or locate useful information for their research endeavours. In addition, students' capabilities to articulate their views and perspectives would also be enhanced if they are proficient in critical reading skills. The importance of critical reading skills is also outlined in Malaysia Education Blueprint 2015–2025 which aims to produce highly competent graduates as well as innovating the current Institutes of Higher Learning educational system.

However, despite the importance of reading skills in postgraduate studies, it was found that postgraduate students were still lacking in these skills. Sidhu et al. (2016) investigated postgraduate students' critical reading skills and found that students had limited critical reading skills as they found it was difficult to analyse and interpret the materials that they read. Besides, many postgraduate students underestimated the challenge in meeting the needs and demands of academic reading when pursuing their studies (Seng & Zainal, 2017). Despite the raising concerns on postgraduate students' critical reading skills, there were very few studies that explored postgraduate students' perceptions and their actual performance on critical reading skills. Thus, this paper will investigate postgraduate students' perceived and actual performance on critical reading skills to see whether there is any significant difference between the two. The study was guided by the following three main research questions:

- What are postgraduate students' perceived performance in critical reading skills?
- What are postgraduate students' actual performance in critical reading skills?
- Is there a significant difference between postgraduate students' perceived and actual performance in critical reading skills?

2. Literature Review

Reading is the key component of learning. Reading critically does not necessarily mean being critical of what one reads, for example claiming that it is somehow faulty or flawed. Critical reading involves presenting reasoned arguments that evaluate and analyse something that has been read. Critical reading is defined as "(1) the process of making judgments in reading; evaluating relevance and adequacy of what is read; (2) an act of reading in which a questioning attitude, logical analysis, and inference are used to judge the worth of what is read according to an established standard; and (3) the judgment of validity or worth of what is read, based on sound criteria of standards developed through previous experience" (Thuy, 2015). Critical reading is a vital skill that should be instilled and taught to students during their schooling process. Furthermore, it has always been said as one of the aims and outcomes of education especially at a higher level (Koray & Cetinkilic, 2020). It is the cognitive ability that is expected to be possessed by every student in tertiary level. This is because students' ability to read critically enables them to judge and evaluate reading materials made available to them especially in terms of the author's credibility and the ideas and facts presented in the text.

Since critical reading can be taught and trained, it is essential to teach critical reading skills to students at every level of the education process. This is to ensure that the new generation is equipped with the necessary skills that will assist them in the reading process. The topic of developing students' critical reading always has a prominent place among the researchers and educators. Numerous studies have been conducted to investigate the students' critical reading ability in English language. (Sultan, et al., 2017; Alqatanani, 2017; Karabay, 2015; Zin et al., 2014; Zin & Eng, 2014; Khodary & Abdallah, 2014; and Kobayashi, 2007). All these studies have revealed significant roles of critical reading ability on students' success in academic study and its powerful effect on students' critical thinking. More

specifically, a study by Sultan et al. (2017) reveals that critical literacy approach had a significant effect on the pre-service language teachers' critical reading skills, which include interpretation, analysis, making an inference, evaluation, explanation, and self-regulation. Another study conducted by Alqatanani (2017) employing a programme based on multiple intelligences in improving the students' critical reading skills revealed the significant effect of the programme to the students' critical reading skills.

Moreover, a study conducted by Karabay (2015) found that when reading texts, critical readers are always analytical while reading the texts; especially they take critical notes and underline important information in the texts. Similarly, Kobayashi (2007) also indicated that critical readers substantially produce critical notes while reading expository texts, compared to the less-critical readers who rely much on making summaries of the texts. These two studies indicated that critical reading is a sceptical, careful, active, reflective, and analytical activity to judge the value of the text which the readers do while reading texts. It is true that when reading texts, critical readers do not only grasp what is explicitly stated in the text but also go far beyond it using their high order thinking skills (HOTS) to tackle and evaluate the content of reading texts. These sceptical and analytical skills are required because of the emergence of the internet and other media of literacy that provide much of information to the students which are easily exposed to.

There is no denying that reading at the postgraduate level is critical as students often need to read actively in-depth vast amounts of literature in order to explore their research topics. This was also reiterated by Wallace and Wray (2021) who stressed that it is very important for postgraduate students to be proficient in language skills especially in critical reading as it acts as a basis for creation of knowledge necessary for continuous improvement in higher education. Besides, critical reading is very essential as postgraduate students are required to read large numbers of academic materials to gain insights and information relevant to their study as well as to develop deeper understanding of their research topics. By being proficient in critical reading, they are able to analyse, synthesise and evaluate the information that they obtain from academic texts (Nadia Anuar & Sidhu, 2017). Furthermore, Hidayati et al. (2020) stated that students with high critical reading abilities can go beyond the materials presented by inquiring, generating hypotheses, seeking evidence, and validating assumptions which will help them in choosing or rejecting the ideas put forward in academic texts and most important of all they know the reasons why they do them All these reiterate the importance for postgraduate students to be proficient in critical reading skills.

3. Research Method

This study was conducted in a private university in Petaling Jaya, Malaysia. A total of 50 postgraduate students were involved in this study. This study employed a quantitative research design where data were collected using a questionnaire and a reading test based on the Malaysian University English Test (MUET) Reading Examination Paper. The questionnaire was designed based on previous literature and the instruments that have been used in some related studies (Sidhu et al., 2017; Sidhu et al., 2016). The questionnaire consisted of two main sections. Section A covered the demographic profile related to the participants such as gender, age, nationality and academic qualifications. Meanwhile, Section B explored students' perceived performance and readiness in critical reading skills.

The content validity of the questionnaire was established by a panel of two experts. The experts read through the items in the questionnaire for their relevance, accuracy in measuring what they are supposed to. The reliability of the questionnaire was established using the Cronbach Alpha and the value of Cronbach alpha was found to be 0.750 which was considered high based on Tavakol (2011). Meanwhile, the aspects of validity and reliability do not rise for the reading test since the test employed in this study is an existing MUET Paper 3 Test which has been moderated, pilot tested and checked for validity and reliability by the Malaysian Examination Council.

4. **Results**

This study involved a group of 50 postgraduate students doing their postgraduate degree in the field of education. The demographic profile of the participants is summarized in Table 1 below.

Items	Number	Percentage
Gender		-
Male	20	40.0
Female	30	60.0
Age		
Less than 32 years old	15	30.0
32 to 35 years old	20	40.0
36 years old and above	15	30.0
Marital Status		
Married	18	36.0
Single	32	64.0
Programme of Study		
PhD (Education)	40	80.0
Master of Education	10	20.0
Research Design		
Quantitative Method	15	30.0
Qualitative Method	5	10.0
Mixed Methods	30	60.0

 Table 1. Demographic Profile of Respondents

Out of 50 participants involved in this study, 30 of them were female while the remaining 20 were male. Meanwhile, in terms of age, there were similar numbers of participants in two age groups; less than 32 years old and 36 years old and above in which both groups had 15 participants each. The remaining 20 participants aged between 32 to 35 years old. Majority of the students were single (64.0%) while the remaining 36% were married. Next, in terms of programme of study, most of the students were PhD students (80.0%). Meanwhile, in terms of research design, 15 of them used quantitative method, five used qualitative method while the remaining 30 students used mixed methods for their study.

The first research question in this study explored postgraduate students' perceived performance in critical reading skills. The items in this section were divided into four main skills, namely summarising, making inferences, analysing and drawing conclusions. The data for the perceived performance were taken from the questionnaire where the postgraduate students evaluated themselves in terms of their critical reading skills. Students were required to respond to the items based on a 5point Likert scale. A score of 4 and above would demonstrate a high ability on the items. Meanwhile, a score of 3 would demonstrate moderate ability and a score of below 3 would exhibit limited to weak ability on the items. The findings are presented in Table 2 below.

Table 2. Postgraduate Students' Perceived Performance in Critical Reading Skills

	Mean	SD
Overall summarising skills	4.25	.761
Overall making inferences skills	3.23	.765
Overall synthesising skills	3.50	.755
Overall drawing conclusions skills	4.01	.865

Overall	3.75	.787	
Scale: 1=Weak, 2= Limited, 3=	Fairly, 4= Goo	od, 5= E	Excellent

From the above findings, it can be seen that the postgraduate students rated their overall critical reading skills between fairly to good (M=3.75, SD=.787). They rated themselves having good ability in summarising (M=4.25, SD=.761) and drawing conclusions (M=4.01, SD=.865). Besides, they believed that they possessed moderate ability in making inferences (M=3.23, SD=.765) and synthesising (M=3.50, SD=.755).

The second research question examined the postgraduate students' actual performance in critical reading skills. The data for the actual performance were taken from the reading test where the postgraduate students were tested on summarising, making inferences, synthesising, and drawing conclusions skills. Students were scored based on their answers for each skill. Similar to the scale for the perceived performance, a score of 4 and above would demonstrate a high ability in the skills. Meanwhile, a score of 3 would demonstrate moderate ability and a score of below 3 would exhibit limited to weak ability in the skills. The findings are presented in Table 3 below.

Table 3. Postgraduate Students' Actual Performance in Critical Reading Skills

	Mean	SD
Overall summarising skills	3.12	.861
Overall making inferences skills	2.47	.754
Overall synthesising skills	2.34	.779
Overall drawing conclusion skills	2.68	.683
Overall	2.65	.769
Scale: 1=Weak 2= Limited 3=Fairly	4 = Goo	d 5=1

Scale: 1=Weak, 2= Limited, 3=Fairly, 4= Good, 5= Excellent

Overall findings on the actual performance displayed in Table 3 indicated that the postgraduate students possessed limited ability in critical reading skills (M=2.65, SD=.769). The students scored poorly in making inferences (M=2.47, SD=.754), drawing conclusions (M=2.68, SD=.683) and the lowest in synthesising (M=2.34, SD=.779). However, they managed to score fairly in summarising skills (M=3.12, SD=.861) which showed that they had moderate ability in the skills.

Next, the third research question investigated whether there is a significant difference between postgraduate students' perceived and actual performance in critical reading skills. A paired sample t-test was conducted in order to determine if there was any significant difference in the mean scores of the students' perceived and actual performance in critical reading skills. The results of the test are presented in Table 4.

Table 4. Paired sample t-test results for PG students perceived and actual performance

	Self- perceived	Actual	Mean difference	t	df	Sig. (2- tailed)
Summarising	4.25	3.12	1.13	6.87	49	.000
Making Inferences	3.23	2.47	.76	3.23	49	.000
Synthesising	3.50	2.34	1.16	6.94	49	.000
Drawing conclusions	4.01	2.68	1.33	7.25	49	.000
Overall critical reading skills	3.75	2.65	1.10	6.72	49	.000

Based on the results shown in Table 4, it can be seen that there is a statistically significant difference in the mean scores between postgraduate students' perceived (M=3.75) and actual performance (M=2.65) conditions; t (49) =6.72, p=0.000 in the overall critical reading skills. Besides,

further results indicated that there is a statistically significant difference in the mean scores between postgraduate students' perceived and actual performance in all the four skills being tested. The highest mean difference recorded was for drawing conclusions (Mean difference=1.33) while the lowest mean difference recorded was for making inferences (Mean difference=.76).

5. Discussion

Based on the findings, it can be seen that the postgraduate students perceived that their critical reading skills were between a fair to good range with the highest score recorded for summarising (M=4.25) and the lowest in making inferences (M=3.23). These findings are similar to the findings of Nadia Anuar and Sidhu (2017). In their study on postgraduate students' perspective of critical reading, 30 social science postgraduate students were involved in rating their perceived performance in six skills mentioned in Bloom's Taxonomy namely: knowledge, comprehension, application, analysis, synthesis and evaluation. The data were collected using a questionnaire which consisted of 39 items related to students' frequency use of critical reading skills. The results indicated that the postgraduate students had moderate to high readiness in the six skills with the highest mean scores in synthesis (M=3.592) and lowest in evaluation (M=3.379). These results suggested that the postgraduate students were confident and believed that they possessed the ability to use the critical reading skills when reading academic texts and materials.

The results of this study also revealed that the postgraduate students overestimated their actual performance in the four skills when compared to their perceived performance as they scored below than average marks for making inferences, synthesising and drawing conclusions. Likewise, their actual performance also displayed only average marks for summarising in the reading test. Several studies also reported similar findings that the students possess low competency in critical reading. In Khodary and Abdallah's (2014) study, they found that the students lack critical reading in several aspects such as drawing conclusions, identifying cause and effect relationships, making inferences and evaluating arguments. They also argued that inappropriate methods of teaching critical reading could be a contributing factor behind these limitations. Besides that, Zin et al. (2014) examined tertiary students' level of critical reading skills specifically in the areas of analysis, evaluation and understanding and their findings revealed that students' inferencing skills were poor, and they were unable to analyse and evaluate information read in a critical manner. The researchers also implied that students had not acquired the desirable higher order thinking skills required for tertiary level.

Furthermore, the results of this study also indicated that there is a significant difference between postgraduate students' perceived and actual performance in all the four critical reading skills (summarising, making inferences, synthesising and drawing conclusions). The highest mean difference was recorded for drawing conclusions (Mean difference=1.33) and the lowest in making inferences (Mean difference=.76). These findings are similar to a study conducted by Gorzycki et al. (2014). They reported that the students' performance in the reading test was poor and did not reflect their positive self-perception. Thus, they too implied that the students overestimated their critical reading skills.

6. Conclusion

The findings from this study suggested that there is a need for innovative approaches and methods to develop postgraduate students' critical reading skills as their current competency leaves much to be desired. As stressed by Wallace and Wray (2021), postgraduate students need to be competent in critical reading skills as it is one of the important pillars that will help the students to be successful in their postgraduate studies and thus, graduate on time. This is because in postgraduate studies, students need to read large quantities of texts accurately and critically. The reading process requires students to be able to analyse and evaluate the strengths and limitations as well as engage with the texts. Besides, by being competent in critical reading skills, it helps students in developing their critical thinking which enables them to not just understand theories and concepts that they study but also be able to form well-reasoned judgements about the theories. Hidayati et al. (2020) argued that critical thinking habits can be fostered through critical reading ability. When students are exposed to

critical reading skills, they will start to see the cause – and – effect or comparing relationships in the text or adopting critical stance toward the text. Reading critically differs from other forms of reading that the reading act goes beyond the literal meaning by questioning the functions and purposes of the text. Reading with awareness of similarities and differences between what the reader has already seen and what he is seeing in the text he is reading. It was clear that the process involves analytic thinking and evaluating what one reads in which it requires higher order cognitive skills and comprehension skills such as making inferences, reasoning and judging. These skills are important in order to infer compare, distinguish between facts and opinions, and identify the author's intention. This shows how critical reading helps in shaping postgraduate students' critical thinking. Moreover, critical reading also contributes to developing postgraduate students' critical writing skills as they play a significant role in students' success in postgraduate studies. Atayeva et al. (2019) argued that a critical reader evaluates the attempts of others to communicate with and convince their target audience by developing a sufficiently strong argument and producing a written account of the argument by making it as clear as possible. Successful writers, therefore, are those who can apply their critical reading skills to engage critically with the literature in the field of enquiry. Thus, given this point, it is vital for postgraduate students to foster and acquire critical reading skills because these skills can aid them to become capable researchers and ensure success in their postgraduate studies.

7. Suggestions for Future Research

There are several limitations of this study that can be further improved in future research. In terms of the sample size, this study was only limited to postgraduate students from a private university located in Petaling Jaya, Selangor. Thus, the results cannot be generalized on the entire population of postgraduate students. Besides, data were collected via a questionnaire and though every effort was taken to ensure respondents gave their true and honest opinions, there was no guarantee that they did not provide socially accepted responses. It is recommended that future studies involve a larger sample of postgraduate students from various universities in Malaysia as it ensures the better representativeness of the sample and allows more precise and generalizable results. Other than that, future studies can employ a mixed-method approach which employs both quantitative and qualitative approaches as it can provide a rich dataset as well as producing broader, and more meaningful findings. Nonetheless, this study has shed some light on postgraduate students' performance in critical reading skills and stressed the need for the development of these skills among the students.

8. Co-Author Contribution

The authors affirmed that there is no conflict of interest in this article. Author 1 carried out the fieldwork, prepared the literature review and the statistical analysis. Author 2 conceptualised the project and prepared the instruments and overlooked the writeup of the whole article. Author 3 carried out the data entry and interpretation of the results.

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