Linguistic Preparedness and Reading Challenges for Graduate Students across Five Disciplines in Pakistan

Sultan Muhammad[1]
Ayesha Sohail[2]

Abstract

The increased influx of students in the universities around the world in the past 10 years, including Pakistan; has led to serious concerns and challenges in supporting the study success and academic achievements of the linguistically diverse student population. Weaker language proficiency and academic language skills, especially academic literacy skills; have been pointed out as some of the major factors leading to poor academic outcomes (Daller, Kuiken, Trenkic, & Vedder, 2021; Uccelli, Galloway, Barr, Meneses, & Dobbs, 2015). Building on the two recent research studies, i.e., Hartshorn, Evans, Egbert, & Johnson (2017) and Anderson (2015) in ESL context in the U.S., this paper presents results of the study that explored the relative importance of reading compared to the other three language skills, graduate students' level of linguistic preparedness for their graduate studies and professional work, and reading challenges faced by graduate level L2 English learners in Pakistan in the selected five disciplines (i.e., English, Business Administration, Computer Science, Education, and Botany). Data was collected through the two adapted survey questionnaires. Responses were analyzed using descriptive statistics and frequencies. Analysis of the results indicate that a great majority of students and teachers consider reading to be more important compared to the other three language skills. Almost half of the total 265 students consider themselves to be linguistically little and well prepared respectively for graduate study within their disciplines and more than half of student respondents think to be little prepared for professional work linguistically in future within their disciplines of study. Analysis of the responses of a great majority of teachers shows that their students are linguistically little prepared both for graduate study and future professional work. A great majority of students and teachers consider the following five as the greatest reading challenges (1) Lack of strategic reading skills, (2) Slow

---

[1] PhD Scholar, Department of English University of AJ&K, Muzaffarabad
[2] Professor, Department of English University of AJ&K, Muzaffarabad

reading rate or speed, (3) Limited comprehension, (4) Limited academic vocabulary knowledge, (5) Lack of critical thinking skills. In addition, lack of motivation to reading in English was also pointed out to be another greatest challenge. Pedagogical and practical implications of the findings of this study have been discussed in this paper in the results and discussion section.

1. Introduction

The massive influx of the culturally and linguistically diverse student population into the universities of the English speaking countries and other nations where English is used as a foreign language or as the language of instruction has posed serious challenges to many universities in terms of supporting the study needs and academic success of this diverse population (Daller, Kuiken, Trenkic, & Vedder, 2021). Concerns have been expressed and a number of factors were indentified that influence the academic performance and success of the university students. A similar trend of massive enrollment was seen in the institutes of higher education in Pakistan within eight years after the establishment of the Higher Education Commission of Pakistan (HEC) in 2002 with the charge to spearhead the government's reform agenda and facilitate the development of the local universities as centers of excellence for education, research, and socio-economic development (Anwar & Clark, 2007). As a result, universities in Pakistan now host an increasing numbers of graduate students than ever before.

This situation calls for immediate attention and serious consideration, especially with regard to understanding and supporting the linguistic and academic literacy needs of the massive population of the graduate students in Pakistani universities and the challenges faced by them in academic language and literacy skills, especially reading. In addition to clear indications in scholarly literature for addressing such challenges, there are three important reasons that point to a careful consideration in this direction (Hartshorn et al., 2017). First, it is the shared responsibility of the universities to take measures and ensure that students 'achieve their full potential both as students and as graduates'. Second, students' academic success is an essential criterion and predictor of the quality of education in the institutions of higher education. Third, employers often

express frustration over the linguistic limitations of the graduate students which in turn threaten the reputation of the institutions and demand for higher quality and standards (Alyahyan & Düştegör, 2020; Arkoudis, Baik, & Richardson, 2012; Murray, 2011, p. 27). Within this context, the present study is an effort to highlight and understand the linguistic and academic literacy needs, especially related to the reading skills by examining the relative importance of reading skills, the level of linguistic preparedness of the graduate students across five popular disciplines for their graduate level studies and professional work, and the major challenges they face while reading in English. It is worth mentioning here that unlike the two previous related research studies Hartshorn et al., (2017) and Anderson (2015) where the respondents were only professors, the strength of the current research study lies in that the responses were collected both from teachers and the students.

As stated earlier, supporting students' learning and growth and knowing their educational needs in order to help them succeed academically and professionally are some of the most fundamental roles and responsibility of higher education institutions (Alyahyan & Düştegör, 2020; Murray, 2011). Within this specific context, the present study is an effort (1) to find out the relative importance of reading compared to the other three language skills and examine the linguistic readiness of the Pakistani graduate students as well as the reading challenges they face and (2) to highlight the needs of these students across five popular study fields and the measures that universities may take to help them succeed academically.

2. Literature Review
This section presents a brief review of the relevant literature with the specific focus to contextualize this study and evaluate the established knowledge on the topic and various aspects of this study.

2.1 Impact of Students' Demographic Shift on the Universities of English speaking Countries and Factors Affecting Students' Academic Success
There has been a great deal of discussion over the impetus and effects of changes in students' demographics and enrollment and the challenges thus posed by such trends in higher education in the UK, US, and Australia and other countries where English is used as a medium of instruction (EMI). Two forces have been pointed out by researchers for the unprecedented

increase from 2 million to 5.3 million between the years 2000 to 2017 of international student population in the universities in English speaking countries, i.e., the internationalization of education and the widening participation (Daller et al., 2021). These phenomena posed various types of serious challenges to the universities and other stakeholders who are responsible for designing and implementing higher education programs as well as imparting material and delivering course content to students (Murray, 2011). Weaker language proficiency and insufficient academic language skills, especially academic literacy skills; have been pointed out as some of the major factors leading to poor academic outcomes (Uccelli et al., 2015).

2.2 Trends in Higher Education in Pakistan and Enrollment Statistics

There has been sudden shift in the higher education policy of government of Pakistan after the establishment of the HEC with the goal to uplift the status of higher education and develop a strong knowledge economy and research culture in the country. The reform agenda in higher education at all levels and the record heavy investments in higher education suggest government's awareness about survival in the global market with a national workforce that may satisfy the demands of the market and industry (Anwar & Clark, 2007). These impetuses and the goal of transforming the country into a knowledge-based economy fuelled certain new trends. The mushroom growth of new universities and high enrollment of graduate students in Pakistan has been on the rise since the establishment of HEC. There were 106 universities in 2005 as compared to 07 universities in 1971(Rahman, 2005). Today, HEC recognizes as many as 232 universities.

There has been 78% increase in the number of universities/Degree Awarding Institutions (DAIs) and 174% percent increase in student enrollment between the years 2010 to 2015 (Mahmood, 2016). In addition to many others, the following three targets in Vision Pakistan 2025 are worth mentioning: (a) increasing student enrollment from 1.5 million to 5 million, (b) raising the number of PhDs from 7000 to 15000, and (c) doubling the number of DAIs from 156 to 300. The most striking are the statistics related to the trends in higher education at the graduate level (MS/M.Phil and PhD). In 55 years (i.e., from 1947 to 2002), a total of 3,281 PhD degrees were awarded by Pakistani universities, a total of 7,051 PhD degrees have been awarded only in a period of five years from 2010

to 2015 (Ali, 2017). According to the enrollment statistics of the Higher Education Commission, Pakistan (n.d.), the sharp increase in graduate students' enrollment within a period of ten years in Pakistan from 15,569 to 138,481 between the years 2005-2015 indicate that this number is going to rise in the coming years. Such an unprecedented increase of the graduate students in Pakistani universities is likely to pose serious challenges. The new trends have put new demands on the university level teachers. Now, they not only have to impart knowledge but are also expected to build and disseminate knowledge. In addition, they have other more important responsibilities, i.e., to prepare students not only for success in their studies but also to help their students carry out these roles in future and join the workforce in the country as stated by Hartshorn et al., (2017). In view of this situation, students 'need teachers who are adequately prepared in both subject content and skills that are maximally productive to meet the educational needs of their students' (Clark, 2005, p. 55). In view of such shifts, it is essential for all institutions of higher education (HEIs) to understand and cater for the needs of students. This situation demands linguistic readiness and preparation of graduate students by their professors in addition to content knowledge so that they may be able to succeed in their university studies and effectively transition into the workforce.

2.3   Important Considerations for Universities around the World and in Pakistan

Considerations of challenges posed by the massive influx of students into the universities of English speaking nations and other EMI countries led a number of researchers recently to understand the needs of the diverse student population and highlight important consideration to ensure students' content learning and academic success. Students' linguistic preparation and readiness for success in their studies and effective transition into the professional workforce have been considered important considerations for universities (Arkoudis, Baik, & Richardson, 2012; Hartshorn, et al., 2017, p.37). Strong academic language abilities and literacy skills were also pointed out as essential for academic success of university students because weaker language and literacy skills lead to poorer academic outcomes (Anderson, 2015; Daller & Phelan, 2013; Murray, 2016, Wang, 2016). Measures such as tighter regulations, the use of remedial programs, suitable support system, and tutoring have been recommended for supporting students with insufficient language abilities and the development of specific aspects of academic language and literacy

skills which are critical for academic success (Crawford & Wang, 2015; Murray, 2010; Weerakkody & Jerez, 2018). Supporting students' learning and growth and knowing their educational needs in order to help them succeed are one of the most fundamental roles and responsibility of higher education institutions (Daller et al., 2021). However, this area has not yet been given any serious and careful consideration in Pakistan despite the recently unprecedented increase in the enrollment of students in Pakistani universities, especially at the graduate level (i.e., M.Phil and PhD).

2.4   Importance of Reading for L2 English Learners in Academic Contexts

The ability to read efficiently for academic purposes is widely recognized as a critical skill for all L2 learners, especially for students at the more advanced levels. Reading skill is also considered important for success in social and professional life. Promoting stronger literacy and skilled reading abilities is a norm in almost all academic institutions around the world. However, L2 learners are not often given much time and attention to develop strong reading abilities despite greater demanding expectations for success. To become a skilled or proficient reader, one needs to develop advanced and higher level skills in order to handle complex words, build fluency, expand vocabulary, and develop comprehension skills (Gagen, 2007; Grabe & Stoller, 2019; Grabe, 2009). Although scholars have indicated reading skills to be more vital than other skills for the academic success of university students, it is more important for graduate level students because they are expected to read more than ever before and read differently (Anderson, 2015; Anderson, Evans, & Hartshorn, 2014). Graduate level studies demand processing and understanding of the text information for different purposes. It goes beyond the mere reading to understand general information and/or look for specific details. University students need academic abilities and skills that are required to understand and produce written and oral texts and intellectual work specific to a particular subject area (Daller et al., 2021, p. 1453).

2.5   Status of English and Importance of English Language and Reading Skills for L2 English Learners in Pakistan

English has acquired a much wider currency of use in the academic pursuits and higher education in Pakistan for the past ten to fifteen years. One of the most powerful impetuses of this extensive and pervasive use of English has been a sudden shift in the higher education policy of government of Pakistan. Being the academic language of higher education

around the world, English is the language of instruction in institutions of higher education in many countries, including Pakistan. English is also considered an official language along with Urdu in Pakistan (Mahboob, 2003; Mahboob, 2009; Shamim, 2008). Most advanced academic teaching is carried out with English as the medium of instruction in almost all the post-secondary educational institutions in Pakistan, especially in the institutes of higher learning and education. In addition, all text resources that students read are in English. Thus, advanced level proficiency and stronger reading skills are essential for the academic success of L2 English learners in Pakistan, especially at the university level (Muhammad, 2013).

2.6   Factors Affecting Reading Abilities and Comprehension of L2 readers

In simplistic terms, reading can be defined as the ability to extract meaning from a text. Comprehension is by-default purpose of most reading. In this way, reading becomes a meaning-making and comprehending process. But it is not as simple as this. Reading involves finely-coordinated set of lower and higher level processes and component skills. All these complex skills and key component processes work together to generate text comprehension at the required level. In this way, reading can be understood as the pattern of cognitive neural network activations (Grabe, 2014; Perfetti & Adlof, 2012).

Grabe and Stoller (2019) have identified certain factors that affect reading abilities and comprehension skills of L2 readers, which are as follows: (a) influence of prior literacy, (b) limited linguistic knowledge, and (c) insufficient L2 language proficiency etc. In addition, there are certain other important factors that influence L2 readers' reading abilities and comprehension. First, findings of research on the role of vocabulary in reading comprehension of L2 learners suggest that limited vocabulary negatively affect reading comprehension. For L2 readers to comprehend a text, knowledge of 95% to 98 of the words is important (Nation, 2006; Schmitt, Grabe, & Jiang, 2011). Second, morphological awareness also plays an important role in text comprehension. Research in this area suggests that although L2 learners develop explicit morphological knowledge, they do not develop unconscious automatic word decoding skills like L1 readers (Kuo & Anderson, 2006; Zhang, 2013). Third, as indicated by Kendeou and van den Broek (2007); learners' successful activation of prior knowledge about a topic facilitates reading comprehension. Fourth, reading is effortful and fluent reading

comprehension is a strategic process. Research findings related to strategy use and reading comprehension suggest that the use of appropriate set of reading strategies substantially increase comprehension (Grabe, 2009; Wang, 2016). Fifth, research in both L1 and L2 contexts on reading motivation shows that students' motivation and motivational processes facilitate text comprehension (Khatoon, 2021).

In addition, working memory also facilitates reading comprehension. As described by Grabe and Stoller (2019), working memory for reading involves the active use of cognitive processes such as recognizing and storing word information, using syntactic information, connecting pronoun references, building overall text structure, integrating and restructuring information, establishing main ideas, assessing inferences and adapting reader goals. However, L2 learners lack working memory needed for efficient reading because they process language differently than L1 learners (Erçetin, 2015). Although there is still an on-going debate among researchers as to whether difficulties in L2 reading comprehension are a language problem or reading problem, L2 learners' language performance has a strong effect on L2 reading comprehension and reading skills are acquired as an extension of language development (Spencer & Wagner, 2017; Walter, 2007; Wurr, 2003). This indicates that adult L2 learners require higher level language proficiency to be skilled and fluent reader.

2.7 Reading Challenges for First Year University and ESL Students

Previously, two research studies examined reading challenges and expectations of faculty for their first year university students and ESL students immediately prior to graduation and near graduation within five most popular majors for international students in the U.S. In order to determine learning needs and highlight reading expectations of professors for their first year university students and the challenges faced by the students in reading, Anderson (2015) asked 157 professors in 114 departments across five most popular disciplines (i.e., Business, Psychology, Engineering, Biology, and Computer Science) for ESL students in the U.S. about their reading expectations and purposes for which their students read and challenges faced by students in reading for their courses. He found significant differences in the volume of expected reading across the five disciplines and the following reading challenges: inability to read discipline-specific genre material, a lack of motivation, an inability to read strategically, not taking adequate time to complete the

reading, not understanding key vocabulary, inability to handle reading amount, and a lack of critical thinking skills etc. Based on Anderson's (2015) study, Hartshorn et al., (2017) attempted to clarify needs of near-graduation ESL students and the ways in which universities might help them succeed in their studies and future professional lives by examining the reading expectations and challenges of ESL students. They gathered data from 141 professors in 80 departments across the same five disciplines. They found reading and listening to be the most important skills with differences across the five majors, significant decline in the volume of reading from first year to upper division courses within each discipline. Lack of inadequate language skills, strategic approaches to reading, understanding content, comprehension, and academic preparation were identified to be the greatest challenges. Finding of the study suggest that the most important reading purposes and the greatest challenges are closely linked with the reading attributes that are most difficult for L2 learners.

This review of the selected literature shows that skilled reading abilities are essential for academic success of L2 learners and that vocabulary knowledge, morpho-syntactic knowledge and fast and automatic word-recognition skills to parse and decode, background knowledge, and working memory affect reading abilities and comprehension skills of L2 learners. In addition, it also indicates that identifying students' needs and the ways in which universities might help them succeed and provide ongoing support to meet the needs of students is an area worth consideration. Above all, it shows that scholars have started questioning whether the past language development and skills acquisition of students is adequate to ensure their successful progress toward their ultimate goal attainment and effective transition into the workforce. However, these kinds of issues and questions have not yet been considered by anyone in Pakistan or elsewhere. Thus, this study attempted to fill in this wide research gap. Moreover, the two previous studies have a serious limitation of looking into this issue only from professors' perspective. This study went a step further and also included students' own perceptions about their linguistic preparedness and the types of challenges they face in reading.

3. Research Questions
The study attempted to find answers to the following research questions:
1. What, according to the university teachers and graduate students; is the relative importance of reading skills compared to

writing, listening, and speaking skills for students' success during their graduate level studies in Pakistani universities?

2. How much linguistically prepared are the Pakistani graduate students across five disciplines for their graduate level studies and future professional work?

3. What, according to the teachers and students; are the greatest reading challenges that Pakistani graduate students face while reading in English for their courses within their fields of study?

4. Methods and Materials

As stated earlier, this study attempted to find out the relative importance of reading skills compared to writing, listening, and speaking skills for students' success in their graduate level studies across the five selected disciplines (i.e., English, Education, Business Administration, Botany, and Computer Science). However, it mainly focused on exploring the level of linguistic preparedness of Pakistani graduate students for their studies and professional work and the challenges that Pakistani graduate students face while reading in English for their courses within their fields of study. Quantitative research methodology and descriptive survey research design were used. For data collection, survey questionnaires used in the studies by Anderson (2015) and Hartshorn et al., (2017) were adapted and modified. Two survey questionnaires, both print and online versions; were designed with close-ended and open-ended items to obtain responses from graduate level students (M. Phil and PhD) of the selected five disciplines across Pakistan except the province of Baluchistan and Gilgit Baltistan. Both questionnaires were pilot-tested to make them appropriate for use in Pakistan and ensure their validity. Based on the results of pilot-testing and experts' opinions, many items were revised. Non-random, purposive, and convenience sampling procedures were used to obtain responses from 125 professor and 265 graduate students in the those selected universities in the Federal Capital Territory, Azad Jammu and Kashmir, the Punjab, Sindh, and Khyber Pakhtunkhwa where the selected graduate degree programs were offered. Descriptive statistics and frequencies were used to analyze data.

5. Results and Discussion

Results of each of the three research questions will be presented, analyzed, and discussed one by one in the following sections. Both data sets were checked for errors by running descriptive statistics, using registered version of IBM SPSS Statistics 21. In order to find answer to the research

questions, descriptive statistics and frequencies were run. The first research question aimed at finding out the importance of reading skills compared to the three other language skills, i.e., writing, listening, and speaking for the success of students in their graduate level studies.

5.1   Relative Importance of Reading Skills Compared to Writing, Listening, and Speaking Skills

Both professors and the graduate students across the five selected popular fields of study were asked to rate the importance of the four language skills for the success of students in their graduate level studies. The scale ranged from 1 to 4 (i.e., 1=Not Important, 2=Somewhat Important, 3=Important, and 4=Very Important). As the frequency counts of the responses of the graduate students and their professors in the Table 5.1.1 below indicate, a great majority of the respondents (i.e., 194 out of the total 265 students and 104 out of the total 125 teachers) conceived reading skills to be very important. In terms of importance, readings skills are followed by writing skills as rated by more than half of the total respondents (i.e., 159 students out of the total 265 and 96 out the total 125 teachers). In addition, almost half or a little more than half of the respondents considered speaking and listening skills to be important.

Table 5.1 Importance of the Four Language Skills for Success of Students their Graduate Level Studies

Respondents	Language Skills	Not Important		Somewhat Important		Important		Very Important	
Students	Reading	00	0.0%	05	1.9%	66	24.9%	**194**	**73.2%**
	Writing	01	0.4%	14	5.3%	91	34.3%	**159**	**60.0%**
	Listening	00	0.0%	23	8.7%	111	41.9%	131	49.4%
	Speaking	00	0.0%	17	6.4%	104	39.2%	144	54.3%
Teachers	Reading	00	0.0%	00	0.0%	21	16.8%	**104**	**83.2%**
	Writing	00	0.4%	00	0.0%	29	23.2%	**96**	**76.8%**
	Listening	00	0.0%	12	9.6%	62	49.6%	51	40.8%
	Speaking	00	0.0%	10	8.0%	55	44.0%	60	48.0%

Analysis of these response patterns indicate that both the graduate students and their professors consider readings skills to be more important compared to writing, listening, and speaking skills for the success of students in their graduate level studies. Thus, reading and writing skills are perceived as most important skills by both students and their professors.

The findings of this study pertaining to the importance of the four language skills are slightly inconsistent with the findings of Hartshorn et al., (2017) in which the receptive skills (i.e., reading and listening) were

found to be more important than the productive skills (i.e., writing and speaking). In this study, reading skills are considered to be more important as compared to writing, listening, and speaking skills and writing skills almost equally important as reading skills. Nevertheless, the findings with regard to the relative importance of reading skills in comparison to writing, listening, and speaking skills are similar. This view of the prominence of reading and writing skills reveal the primary importance of these skills in the graduate students' learning experiences, academic success, and final goal attainment in the universities. One important implication of the findings of current study is that the graduate students in the universities in Pakistan need to have strong reading and writing skills and they need to be provided ongoing to further improve their reading and writing skills.

5.2 Linguistic Readiness of Graduate Students for Study and Future Professional Work

The second research asked students and their professors how much linguistically prepared students are across the five disciplines for graduate study and future professional work within their fields of study. The scale consisted of 'Not Prepared', 'Little Prepared', and 'Well Prepared'. The frequency counts of the responses of students in the Table 5.2.1 below show that a little less than half of the total 265 students considered themselves to be little prepared and almost half of them perceive themselves to be well prepared for graduate study in view of the level of four English language skills required for success at the graduate level.

Table 5.2 Perceptions of Students and Teachers about Linguistic Preparedness of Students for Graduate Studies and Professional Work

Respondents	Level of linguistic preparedness	Not Prepared	Little Prepared	Well Prepared
	For graduate study	08 3.0%	**127 47.9%**	**130 49.1%**
Students	For professional work	15 5.7%	**142 53.6%**	108 40.8%
	For graduate study	18 14.4%	**78 62.4%**	29 23.2%
Teachers	For professional work	33 26.4%	**72 57.6%**	20 16.0%

As far as the level of linguistic preparedness of the student respondents for future professional within their fields of study is concerned, more than half of the total respondents (i.e., 142 of the total 265 students) reported themselves to be little prepared. However, the responses of professors, who were teaching these students; are more important and meaningful. A great majority of teachers (i.e., 78 and 72 out of the total 125 respondents)

considered their students to be linguistically little prepared for both graduate level studies and future professional work and employment within their fields of study respectively.

Analysis of the frequency counts and responses of both students and teachers with regard to the extent of linguistic readiness of graduate students across the five selected popular disciplines in Pakistani universities across the country indicate that these students are little prepared for graduate level study and future professional work or employment within their fields of study. These findings empirically support the general perceptions of university professors in Pakistan about the graduate level students' inadequate English language proficiency and poor academic language skills for graduate studies and professional work.

These findings have important implications. The universities in Pakistan need to include the component of English language skills in the admission or placement tests and assess the English language proficiency and academic language skills of the students they admit in the graduate level degree programs. In addition, the universities need to have a well-established study support systems and language learning centers to identify and cater for the linguistic needs of the graduate students, especially those at risk the most. Both these important components of the academics and graduate level degree programs will, at least; be the measures to avoid frustration of professors and employers over the limitations of graduate students' English language proficiency and academic language skills. Such standards will protect institutional reputation and increase success rate of the graduate students.

5.3 Major Challenges for Graduate Students while Reading for their Courses

The last research question aimed at identifying the greatest reading challenges for graduate students while reading for their curses across the five selected disciplines. Both students and teachers rated the reading related challenges on a 4-point Likert scale: 1=Not Challenging, 2=Somewhat Challenging, 3=Challenging, and 4=Very Challenging. As the frequency counts and percentage of responses (bold faced) of students and teachers in the Table 5.3.1 and Table 5.3.2 respectively indicate, more than half of the students and teachers identified the following five as the greatest reading challenges at the level of challenging and very challenging:

1) Lack of strategic reading skills
2) Slow reading rate/speed
3) Limited comprehension
4) Limited academic vocabulary knowledge.
5) Lack of critical thinking skills

Table 5.3 Students' Perception Regarding Greatest Reading Challenges

Item Description	Not Challenging	Somewhat Challenging	Challenging	Very Challenging
Understand discipline specific content	46 17.4%	109 41.1%	82 30.9%	28 10.6%
Lack of motivation to read in English	57 21.5%	93 35.1%	89 33.6%	26 9.8%
Low motivation to read due to type of teacher instruction	51 19.2%	99 37.4%	94 35.5%	21 7.9%
Lack of strategic reading skills	33 12.5%	81 30.6%	**122 46.0%**	**29 10.9%**
Slow reading rate/speed	45 17%	78 29.4%	**103 38.9%**	**39 14.7%**
Limited comprehension	39 14.7%	89 33.6%	**107 40.4%**	**30 11.3%**
Limited academic vocabulary knowledge	23 8.7%	83 31.3%	**104 39.2%**	**55 20.8%**
Lack of time	43 16.2%	69 26.0%	*93 35.1%*	*60 22.6%*
Poor academic preparation	57 21.5%	89 33.6%	78 29.4%	41 15.5%
Not reading to learn	81 30.6%	93 35.1%	68 25.7%	23 8.7%
Struggle with reading graphs	53 20.0%	98 37.0%	91 34.3%	23 8.7%
Lack of critical thinking skills	43 16.2%	74 27.9%	**110 41.5%**	**38 14.3%**

Moreover, more than half of the student respondents (i.e., 153 out of 265 students) identified 'lack of time' as another greatest challenge. One possible explanation for the identification of lack of time as a greatest challenge could be the reason that most of the graduate students in Pakistan are employed which makes it harder for them to effectively manage their time. Additionally, a great majority of teachers (i.e., more than 70 out of the total 125 teachers) also identified the following four as other major challenges: (1) lack of motivation to read in English, (2) Poor academic preparation, (3) not reading to learn, and (4) struggle with reading graphs.

The first two top reading challenges, i.e., lack of strategic reading skills and slow reading speed are associated with reading processes and approaches. The other three, 'limited comprehension', 'limited academic

vocabulary knowledge', and 'lack of critical thinking skills' could be associated to both inadequate language proficiency and poor language skills.

Table 5.4 Teachers' Perception about Greatest Reading Challenges

Item Description	Not Challenging	Somewhat Challenging	Challenging	Very Challenging
Understand discipline specific content	5 4.0%	47 37.6%	49 39.2%	24 19.2%
Lack of motivation to read in English	10 8.0%	39 31.2%	*56 44.8%*	*20 16.0%*
Low motivation to read due to type of teacher instruction	27 21.6%	49 39.2%	42 33.6%	7 5.6%
Lack of strategic reading skills	4 3.2%	32 25.6%	**59 47.2%**	**30 24.0%**
Slow reading rate/speed	2 1.6%	27 21.6%	**74 59.2%**	**22 17.6%**
Limited comprehension	2 1.6%	18 14.4%	**63 50.4%**	**42 33.6%**
Limited academic vocabulary knowledge	6 4.8%	18 14.4%	**57 45.6%**	**44 35.2%**
Lack of time	22 17.6%	54 43.2%	38 30.4%	11 8.8%
Poor academic preparation	9 7.2%	35 28.0%	*54 43.2%*	*27 21.6%*
Not reading to learn	7 5.6%	34 27.2%	*52 41.6%*	*32 25.6%*
Struggle with reading graphs	12 9.6%	38 30.4%	*45 36.0%*	*30 24.0%*
Lack of critical thinking skills	6 4.8%	18 14.4%	**55 44.0%**	**46 36.8%**

These findings are consistent with the findings researchers such as Grabe and Stoller (2019), Schmitt, Grabe, and Jiang (2011), Kuo and Anderson (2006), Zhang (2013), Grabe, (2009), and Wang (2016) in L1 and L2 reading research contexts. They show that strategic reading skills, fast reading rate, and adequate academic vocabulary knowledge play important role in the overall successful reading experience and comprehension. In addition, another top reading challenge (i.e., lack of motivation to read in English), identified by teachers; is related to the reading behaviors of learners. With the exception of 'lack of strategic reading skills' and 'lack of motivation to read in English', the rest of findings with regard to greatest reading challenges are different from the findings of Anderson (2015).

The findings of the present research have some very important implications. First, these reading challenges point to the inadequacies in the system of education and unsatisfactory situation of English language

teaching, voiced in the scholarly literature related to English language teaching in Pakistan; in the pre-university educational institutions all over the country. Second, graduate students need to have English language proficiency and academic language skills at the levels required for the academic success and final goal attainment. Third, the already recommended language learning centers in universities and the teachers should explicitly address these challenges to ensure academic success of the graduate level students. Fourth, teachers need to facilitate students' motivation and help them understand that they have to assume responsibility for their own learning as recommended by Khatoon (2022) and Hartshorn et al., (2017). Fifth, teachers should clearly state their expectations in the syllabi for their courses about the level at which they require their students to read for their courses.

6. Conclusion

In view of the unprecedented increase in the enrollment of graduate in the universities in Pakistan, there has been a lack of information and empirical data regarding the importance of specific language skills for success of students in graduate level study, their linguistic readiness for graduate study and future professional work, and the greatest challenges they face while reading for their courses. This study was conducted to address these issues and fill in the gape in scholarly literature with the aim to identify and understand the study and linguistic needs of the ever-increasing number of graduate students in Pakistani universities. This study yielded some important findings. First, reading skills are relatively more important compared to writing, listening, and speaking and writing is almost equally important as reading for the success of students in their graduate level study. Second, with regard to the extent of linguistic readiness of graduate students across the five selected popular disciplines in Pakistani universities across the country, Pakistani graduate students are little prepared for graduate level study and future professional work or employment within their fields of study, Third, lack of strategic reading skills, slow reading rate/speed, limited comprehension, limited academic vocabulary knowledge, and lack of critical thinking skills are the greatest challenges that graduate level students face while reading for their course. The HEC, universities, university teachers, and other stakeholders of the higher education in Pakistan can benefit from the findings of this study by making improvements and taking measures to provide on-going appropriate support to graduate students, especially related to their linguistic and reading and writing needs.

References

Ali, A. (2017). *Higher education commission* [PowerPoint slides]. Retrieved from http://www.hec.gov.pk/english/universities/pages/universitiesstatistics.aspx.

Alyahyan, E., & Düştegör, D. (2020). Predicting academic success in higher education: Literature review and best practices. *International Journal of Educational Technology in Higher Education, 17*(3), 1-21.

Anwar, L. S., & Clark, N. (2007, December). Higher education reform in Pakistan. WENR: World Education News+Reviews. Retrieved from https://wenr.wes.org/2007/12/wenr-novemberdecember-2007-feature.

Anderson, N. J. (2015). Academic reading expectations and challenges. In N. Evans, N. J. Anderson, W. Eggington (Eds.), *ESL Readers and writers in higher education:Understanding challenges, providing support* (pp. 95–109). New York: Routledge.

Anderson, N. J., Evans, N. W., & Hartshorn, K. J. (2014, March) Reading and writing expectations of matriculated university students. *Colloquium presentation*, *International TESOL Convention*, Portland, Oregon.

Arkoudis, S., Baik, C., & Richardson, S. (2012). *English language standards in higher education*. Victoria, Australia: ACER Press.

Chen, K. T. (2017). An exploratory study of NNES graduate students' reading comprehension of English journal articles. *Reading in a Foreign Language, 29*(1), 20-35.

Clark, G. (2005). Reforms in higher education in Pakistan. In R. M. Hathaway (Ed), *Education reform in Pakistan: Building for the future* (55-69). Washington, DC: Woodrow Wilson International Center for Scholars.

Crawford, I., & Wang, Z. (2015). The impact of individual factors on the academic attainment of Chinese and UK students in higher education. *Studies in Higher Education, 40*(5), 902-920

Daller, M., Kuiken, F., Trenkic, D., & Vedder, I. (2021). Linguistic predictors of academic achievement amongst international students and home students in higher education: introduction, *International Journal of Bilingual Education and Bilingualism, 24*(10), 1453-1457.

Erçetin, G. (2015). Working memory and L2 reading: Theoretical and methodological issues. *ELT Research Journal*, *4*, 101-110.

Gagen, M. R. (2007). Advanced skills necessary for proficient reading: Overview of key higher level or advanced reading skills. Retrieved from http://righttrackreading.com/ advancedskills.html.

Government of Pakistan, Planning Commission, Ministry of Planning, Development & Reform (2014). Pakistan 2025: One Nation-One Vision. Retrieved from https://www.pc.gov.pk/uploads/vision2025/Pakistan-Vision-2025.pdf

Grabe, W. (2014). Key issues in L2 reading development. In CELC Symposium Bridging Research and Pedagogy (pp.8-18). Retrieved from http://www.nus.edu.sg/celc/research/ symposiumproceedings.php.

Grabe, W. (2009). *Reading in a second language: Moving from theory to practice*. New York: Cambridge University Press.

Grabe, W., & Stoller, F. L. (2019). *Teaching and researching reading* (3rd ed.) New York: Routledge.

Hartshorn, K. M., Evans, N. W., Egbert, J., & Johnson, A. (2017). Discipline-specific reading expectation and challenges for ESL learners in US universities. *Reading in a Foreign Language, 29*(1), 36-60.

Higher Education Commission. (n.d.). *Enrollment at Pakistani universities/dais and constituent colleges.* Retrieved from https://www.hec.gov.pk/english/universities/ Pages/Enrollment/PU-Enrollment.aspx

Kendeou, P., & van den Broek, P. (2007). The effects of prior knowledge and text structure on comprehension processes during reading of scientific texts. *Memory & Cognition*, *35*, 1567-1577.

Khatoon, S. (2021). Reading motivation, attitudes, and their relationships with text comprehension among L2 English learners in Pakistan (Unpublished doctoral dissertation). University of Azad Jammu and Kashmir, Muzaffarabad, Pakistan.

Kuo, L. J., & Anderson, R. C. (2006). Morphological awareness and learning to read: A crosslanguage perspective. *Educational Psychologist*, *41*, 161-180.

Mahbbob, A. (2003). The English Language in Pakistan: A brief overview of its history and linguistics. *Pakistan Journal of Language*, 4(1), 1-28.

Mahbbob, A. (2009). English as an Islamic language: a case study of Pakistani English. *World Englishes, 28*(2), 175–189.

Mahmood, K. (2016). *Overall assessment of the higher education sector* (Study Report 1). Retrieved from http://hec.gov.pk/english/universities/projects/TESP/Documents/ FRAssessment%20HE%20Sector.pdf.

Muhammad, S. (2013). Second language reading instruction in Pakistan. *Procedia-Social and Behavioral Sciences*, *70*(2013), 1403-1412.

Murray, N. (2010). Considerations in the post-enrolment assessment of English language proficiency: Reflections from the Australian context. *Language Assessment Quarterly, 7*), 343-358.

Murray, N. (2011). University post-enrolment English language assessment: a consideration of the issues. *ERGO, 2*(1), 27-33.

Murray, N. (2016). Standards of English in higher education: Issues, challenges and strategies. Cambridge University Press.

Nation, I. S. P. (2006). How large a vocabulary is needed for reading and listening? *The Canadian Modern Language Review*, *63*, 59-82.

Perfetti, C., & Adlof, S. (2012). Reading comprehension: A conceptual framework for word meaning to text meaning. In J. Sabatini, E. Albro, & T. O'Reilly (Eds.) *Measuring up: Advances in how to assess reading abilities* (pp. 3-20). Lanham, MD; Rowman & Littlefield Education.

Rahman, T. (2005). Reasons for rage: Reflections on the education system of Pakistan with special reference to English. In R. M. Hathaway (Ed), *Education Reform in Pakistan: Building for the Future* (87-106). Washington, DC: Woodrow Wilson International Center for Scholars.

Schmitt, N., Grabe, W., & Jiang, X. (2011). The percentage of words known in a text and reading comprehension. *The Modern Language Journal*, *95*, 26-43.

Shamim, F. (2008) Trends, issues and challenges in English language education in Pakistan. *Asia Pacific Journal of Education, 28*(3), 235-249.

Spencer, M., & Wagner, R. K. (2017). The comprehension problems for second-language learners with poor reading comprehension despite adequate decoding: A meta- analysis. *Journal of Research in Reading*, *40*(2), 199–217.

Uccelli, P., Galloway, E. P., Barr, C. D., Meneses, A., & Dobbs, C. L. (2015). Beyond vocabulary: Exploring cross-disciplinary academic-language proficiency and its association with reading comprehension. *Reading Research Quarterly, 50*, 337–356.

Walter, C. (2007). First-to second-language reading comprehension: Not transfer, but access. *International Journal of Applied Linguistics, 17*(1), 14-37.

Wang, Y. H. (2016). Reading strategy use and comprehension performance of more successful and less successful readers: A think-aloud study. *Educational Science: Theory & Practice*, *16*(5), 1789-1813.

Weerakkody, U., & Jerez, E. (2018). International student success: A multilevel perspective on factors that contribute to the success and quality of the experience abroad. *International Journal of Chinese Education, 7*, 22-41.

Wurr, A. J. (2003) Reading in a second language: A reading problem or a language problem? *Journal of College Reading and Learning, 33* (2), 157-169.

Zhang, D. (2013). Linguistic distance effect on cross-linguistic transfer of morphological awareness. *Applied Psycholinguistics*, *34*, 917-942.