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A Comparative Assessment of Reading Comprehension Ability between Deaf and Students without Deaf in English Texts

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Abstract

Reading comprehension is a fundamental skill necessary for academic success, yet its assessment and improvement, particularly in special education contexts, are often neglected. This study aims to investigate the reading comprehension abilities of deaf students (DS) compared to their non-deaf counterparts (NDS) in both seen (SRT) and unseen (URT) English reading texts. Employing a descriptive quantitative research design, reading comprehension tests were administered to eighty basic-level students, comprising forty DS and forty NDS from schools in Surkhet district, Nepal, selected through purposive sampling. The analysis revealed that NDS demonstrated higher reading comprehension abilities compared to DS in both SRT and URT. Additionally, male students outperformed female students overall, with both male and female NDS exhibiting superior performance to their DS counterparts. Moreover, students from both groups performed better in SRT than in URT, and NDS consistently outperformed DS in both types of texts. These findings underscore the challenges faced by DS in mastering reading comprehension skills and highlight the need for targeted interventions to enhance their literacy outcomes. The study contributes to the understanding of reading comprehension disparities between DS and NDS, informing educators and policymakers about the specific needs of deaf students in English language learning contexts.

Keywords: Reading, comprehension ability, seen reading texts, unseen reading texts

Introduction

Reading refers to perceiving a written text in order to understand its contents. Reading is an active skill which involves inferring, guessing, predicting, checking, and asking oneself

skills etc. (Grellet, 1981, p. 8). Furthermore, Doff (2002) states, "Reading involves looking at sentences and words, recognizing them and understanding them - it is a process of making sense of written language" (p. 104). Likewise, Ur (1998) simply defines, 'reading means reading and understanding". Supporting above mentioned ideas, Harmer (1991) also claims, "Reading is dominated by the eyes and the brain. The eyes receive message and the brain then has to work out the significant of these message." From these all opinions, it can be said that reading is "understanding a written text and 'understanding a written text means extracting the required information form it as effectively and efficiently as possible" (Grellet, 1981, p. 3).

Reading comprehension means the process involved in understanding the meaning of written text. To comprehend the meaning means to extract from the printed patterns three levels of meanings: lexical meaning (the semantic content of the words and expressions), structural or grammatical meaning (deriving from interrelationships among words or parts of word or from the other words) and social-cultural meaning (the evaluation which people of his own culture attach to the words and groups of words he is reading (Rivers, 1968). To be to the point, the purpose of reading is comprehension, i.e. to have the ability to gather meaning from the printed page. In this regard, Richards and Renandya (2003) opine that 'reading for comprehension is the primary purpose for reading (though this is sometimes overlooked when students are asked to read overly difficult texts); raising student awareness of main ideas in a text is essential for good comprehension (p. 277). Likewise, Richek et al. (2002) view that reading comprehension depends on the reader's experience, knowledge of language and recognition of syntactic structure as well as the redundancy of the printed passage (as, cited in Lerner, 2003, p. 417).

Despite its significance, the assessment and enhancement of reading comprehension, particularly within special education contexts, remain underexplored areas (Khadka, 2024). In this study, we aim to address this research gap by investigating the reading comprehension abilities of deaf students (DS) compared to their non-deaf counterparts (NDS) in English texts. This comparison is essential for understanding the unique challenges faced by DS in mastering reading comprehension skills and informing targeted interventions to improve their literacy outcomes. By shedding light on the disparities in reading comprehension between DS and NDS, this study contributes to the understanding of their specific needs in English language learning contexts. The findings underscore the importance of targeted interventions to support the literacy development of DS and inform educators and policymakers about strategies for addressing these disparities.

Review of Related Literature

Reading comprehension, thus, refers to an active, dynamic and constructive process in which readers dynamically try to use different cognitive and metacognitive strategies for comprehending a text (Yang, 2002; Dole, Duffy, Roehler & Pearson, 1991; Harvey & Goudvis, 2000; Pressley & Afflerbach, 1995; Allen, 2003; Ghonsooly & Loghmani, 2012) under varying local contexts and environments. There are a number of studies being carried out related to reading comprehension strategies and ability. Researchers believe that when it comes to language learning, most male and female students have different styles and ways of thinking

(Rianto, 2021). Likewise, Sheorey and Mokhtari (2001) investigated the differences in the strategy use between the native English speakers (USA students) and the non-native speakers while reading academic content, found that the female students in the native-speaking group reported a much higher frequency of strategy use, while the group of ESL students did not reflect this gender influence (ibid). In this regard, Rianto (2021) from the study claimed that in terms of the self-assessed online reading ability and the online English proficiency, no gender difference was identified, although the female students had a better mean score than the male students. In the case of less skilled readers, despite having small effect size values, there were significant gender differences in the use of overall strategy and support strategies, with the male students having lower mean scores than the female students. In addition, there were no significant gender differences in the use of problem-solving strategies and global strategies, despite the fact that in both strategies the female students had higher mean scores than the male students.

In the context of Nepal, Sitaula (2012), Paudel (2008), Adhikari (2007), Bishwokarma (2007), Khadka (2007) and Patel (2003) found that male learners of secondary level in Nepal outperformed their female peers in reading skills in English texts. By contrast, Subedi (2000) found that female ninth graders of community schools outperformed their male peers in reading comprehension of unseen texts. In addition, Adhikari (2008) explored that bilingual EFL Nepali learners were better than multilingual ones in comprehending different English texts. Likewise, Sijali (2016) studied the English language proficiency of higher secondary level students in Nepal on 529 learners of different streams such as science, management, education, and humanities. He found that their level of proficiency was not satisfactory on average with insignificant differences between different streams. This finding of the research suggests that reading skills in secondary level learners must have been lower than they should be on the basis of the objectives of the English syllabus.

Despite these studies, there remains a gap in understanding the reading comprehension abilities of deaf students (DS) compared to their non-deaf counterparts (NDS) at the basic level. While research on reading skills in English texts exists, there is a dearth of studies focusing on DS, who often lack exposure to loud reading and face challenges in interpretation due to their hearing impairment. Thus, this study seeks to address this gap by evaluating the reading comprehension abilities of DS and NDS, considering gender differences and types of English texts, to inform language teaching practices and enhance literacy outcomes for DS.

Methodology of the study

In order to carry out this research, the researcher used a descriptive quantitative research design and a reading comprehension test as the tool for data collection. The population of the study was eighty students of basic level, out of which, forty deaf students and forty normal students of basic schools of Surkhet district were randomly selected as the sample of the population. In order to collect the data, four sets of test items were prepared to test their reading comprehension ability. Each set of test items contained both the subjective and objective test items from both the seen and unseen reading text.

Results and Findings

In order to analyze and interpret the data, descriptive statistical tools such as mean (average) and percentage (%) were used on the basis of the test administered to the students studying in government-funded regular and special schools of Surkhet where the able (regular) students and deaf students were studying respectively. The test was administered by dividing the test items both in subjective and objective types to both types of students, i.e. non-disable students (NDS) and deaf students (DS) from both types of reading texts: Unseen Reading Text (URT) and Seen Reading Text (SRT) to the both sexes: boys (M) and girls (F). The full mark of each set of reading text was assigned 30 and the obtained marks of each set of reading text by each student were analyzed and interpreted as follows:

Table 1

Reading comprehension ability of deaf students in comparison to their non-disable students (NDS) in seen and unseen English reading texts

Text	**Tools**	**Marks obtained in the reading text**				**Difference**
		NDS	DS	Difference	Total	
URT	Mean	24.25	21.31	2.94	22.56	**3.41 (11.56%)**
	Percent (%)	80.83%	71.03%	9.8%	75.93%	
SRT	Mean	27	24.94	2.06	25.97	
	Percent (%)	**90%**	**83.13%**	**6.86%**	**86.56%**	

Table 1 presents the reading comprehension ability (RCA) of deaf students (DS) compared to their non-disable counterparts (NDS) in Seen (SRT) and Unseen (URT) English reading texts. In URT, NDS obtained a mean score of 24.25 (80.83%), whereas DS achieved a mean score of 21.31 (71.03%). This indicates a difference of 2.94 (9.8%) in favor of NDS. Similarly, in SRT, NDS attained a mean score of 27 (90%), while DS scored 24.94 (83.13%), resulting in a difference of 2.06 (6.86%) in favor of NDS. Overall, the analysis reveals that NDS outperformed DS in both URT and SRT, with a larger discrepancy observed in URT. The average difference between NDS and DS was 2.94 (9.8%) in URT and 2.06 (6.86%) in SRT out of a total of 30 marks. Furthermore, when considering the total average marks obtained by both groups across URT and SRT, NDS achieved 25.56 (75.93%) compared to DS's 25.97 (86.56%). This highlights a notable difference of 3.419 (11.56%) between the two types of texts.

The data indicate that NDS consistently performed better than DS in both types of reading texts. The larger disparity observed in URT suggests that DS may encounter greater challenges in comprehending unfamiliar texts compared to seen texts. This underscores the need for targeted interventions to support the literacy development of DS, particularly in decoding and understanding unfamiliar language structures and vocabulary. Additionally, the findings emphasize the importance of considering the specific needs of DS in designing

instructional strategies and assessments to promote equitable learning outcomes in English language education.

Table 2

Reading comprehension ability (RCA) of boys and girls of deaf students in comparison to their normal counterparts in seen and unseen English reading texts

Sex	Tools	Marks obtained in the text				Difference
		NDS	DS	Difference	Total	
Boys	Mean	25.75	23.45	2.3	24.6	**0.71**
	Percent	85.83%	79.9%	7.66%	82%	**(2.36%)**
Girls	Mean	25.5	22.28	3.22	23.89	
	Percent	**85%**	**74.26%**	**10.73%**	**79.63%**	

Table 2 presents the reading comprehension ability (RCA) of boys and girls among deaf students (DS) compared to their non-disable counterparts (NDS) in Seen (SRT) and Unseen (URT) English reading texts. For boys, NDS achieved a mean score of 25.75 (85.83%) in both SRT and URT, while DS boys scored 23.45 (79.9%), resulting in a difference of 2.3 (7.66%) in favor of NDS boys. Similarly, for girls, NDS attained a mean score of 25.5 (85%) in both SRT and URT, whereas DS girls scored 22.28 (74.26%), resulting in a larger difference of 3.22 (10.73%) in favor of NDS girls. Overall, the analysis shows that both boys and girls among NDS outperformed their DS counterparts in both types of reading texts. The difference in performance between NDS and DS was more pronounced among girls, with a larger gap observed in both SRT and URT compared to boys.

The data suggests that gender differences exist in reading comprehension ability among both DS and NDS, with girls consistently exhibiting lower performance compared to boys in both groups. This may reflect underlying disparities in language proficiency or learning strategies between boys and girls. Therefore, addressing these gender differences and providing targeted support for girls, particularly among DS, is crucial for promoting equitable literacy outcomes in English language education. Additionally, educators should consider gender-sensitive instructional approaches and interventions to address the unique needs of both boys and girls in language learning contexts.

Table 3

Reading comprehension ability (RCA) of non-disable students (NDS) and deaf students (DS) in SRT and URT

Text	Sex	Tools	Marks obtained in reading text		
			NDS	DS	**Difference**
URT	Boys	Mean	24.5	22.49	**2.01**
		Percent	81.66%	74.98%	**6.10%**
	Girls	Mean	24	20.13	**3.87**
		Percent	80%	67.10%	**12.9%**
	Total	Mean	24.25	21.31	**5.88**
		Percent	80.83%	71.03%	**19.6%**

SRT	Boys	Mean	27	25.45	**1.55**
		Percent	90%	84.83%	**5.16%**
	Girls	Mean	27	24.43	**2.57**
		Percent	90%	81.43%	**8.56%**
Total		Mean	27	24.94	**2.06**
		Percent	**90%**	**83.13%**	**6.86%**

Table 3 provides a comprehensive overview of the reading comprehension ability (RCA) of non-disable students (NDS) and deaf students (DS) in both seen (SRT) and unseen (URT) English reading texts, disaggregated by gender. In URT, boys among NDS achieved a mean score of 24.5 (81.66%), while DS boys scored 22.49 (74.98%), resulting in a difference of 2.01 (6.7%) in favor of NDS boys. Similarly, girls among NDS attained a mean score of 24 (80%), whereas DS girls scored 20.13 (67.10%), indicating a larger difference of 3.87 (12.9%) in favor of NDS girls. Overall, the analysis shows that both boys and girls among NDS outperformed their DS counterparts in URT, with a notable difference of 5.88 (19.6%) observed in favor of NDS across genders. In SRT, NDS boys achieved a mean score of 27 (90%), while DS boys scored 25.45 (84.83%), resulting in a smaller difference of 1.55 (5.16%) in favor of NDS boys. Similarly, NDS girls attained a mean score of 27 (90%), whereas DS girls scored 24.43 (81.43%), indicating a difference of 2.57 (8.56%) in favor of NDS girls. The total average RCA difference between NDS and DS in SRT was 2.06 (6.86%). Overall, the data reveals that NDS consistently outperformed DS in both SRT and URT, with the difference in performance being more pronounced in URT compared to SRT. Additionally, when considering the difference between SRT and URT for both NDS and DS, a notable discrepancy of 3.82 (12.73%) was observed, indicating that NDS experienced a larger drop in performance from SRT to URT compared to DS. These findings highlight the challenges faced by DS in comprehending unfamiliar texts, particularly in URT.

Discussion and Implications

The findings of this study underscore significant disparities in reading comprehension ability (RCA) between non-disable students (NS) and deaf students (DS), with NS consistently outperforming DS across both seen (SRT) and unseen (URT) English reading texts. This discrepancy highlights the challenges faced by DS in mastering reading comprehension skills, particularly in comprehending unfamiliar texts. Similar gender disparities were observed, with boys outperforming girls overall, and NS boys and girls outperforming their DS counterparts. The gender differences in reading comprehension performance align with previous research findings. Prawira and Roswati (2018) found that female students tended to outperform male students in reading comprehension tests, whereas Oda and Abdul-Kadhim (2017) reported that while male learners were proficient in various levels of reading comprehension, female learners excelled particularly in critical-level comprehension. These findings suggest the need for gender-sensitive instructional approaches to address the diverse learning needs of male and female students. Furthermore, the study revealed that NS students exhibited better RCA in both SRT and URT compared to DS

students, indicating the influence of content orientation on comprehension. This finding resonates with previous research by Khoshbakht and Gorjian (2017), Marzban and Davaji (2015), and Ershad (2015), which suggested that simplified texts were more effective for second language learners than authentic ones. Therefore, instructional materials tailored to the specific needs and abilities of DS, such as simplified texts and targeted vocabulary instruction, could enhance their reading comprehension outcomes.

Implications for educators and policymakers are significant. Firstly, interventions should be developed to support DS in mastering reading comprehension skills, including explicit instruction in decoding, vocabulary, and comprehension strategies tailored to their unique learning needs. Additionally, gender-sensitive instructional strategies should be employed to address the diverse reading abilities of male and female students. Lastly, curriculum developers should consider the content orientation of instructional materials, ensuring that texts are accessible and comprehensible to DS, thereby promoting equitable literacy outcomes in English language education.

Conclusion

Reading comprehension is a fundamental skill crucial for academic success, particularly in English as a Foreign Language (EFL) context like Nepal. While prioritized in formal education mastering this skill remains challenging, especially for deaf students (DS) due to their impairment in listening. This study aimed to assess the reading comprehension ability of DS compared to their non-disable counterparts (NDS) and explored gender differences in comprehension performance. The findings reveal significant disparities between DS and NDS, with NDS demonstrating higher proficiency in both seen and unseen English texts. Additionally, gender differences were observed, with boys generally outperforming girls, and NS boys and girls outperforming their DS counterparts.

To address these disparities, recommendations include providing sign language training for teachers or arranging interpreters for DS, designing specialized materials, effective classroom management strategies, and utilizing various communication modes. Moreover, interventions to combat misconceptions and negative attitudes towards female education, particularly among DS girls, are crucial. Furthermore, the study highlights the greater difficulty DS face in comprehending unseen texts compared to seen ones. To enhance reading comprehension, teaching strategies should incorporate diverse texts beyond textbooks, teach sub-skills such as scanning and skimming, and utilize total communication methods, especially for DS.

Overall, the pedagogical implications of this study extend to regular and special teachers, curriculum designers, materials producers, textbook writers, and researchers, emphasizing the importance of catering to the unique needs of hearing-impaired students in reading instruction. By implementing targeted interventions and inclusive teaching practices, educators can promote equitable literacy outcomes for all students, fostering a more inclusive and accessible learning environment.

References

Adhikari, B. R., & Poudel, K. (2020). Approaches and activities adopted by M.Ed. student teachers of English to teach reading : A critical assessment. *Journal of Language Teaching and Research, 11*(3), 364-372.

Adhikari, C. (2008). *Reading proficiency of bilingual and multilingual learners*. An unpublished master's thesis. Tribhuvan University.

Allen, S. (2003). An analytic comparison of three models reading strategy instruction. *International Review of Applied Linguistics, 41*(1), 319-338.

Brown, H.D. (1994). *Principles of language learning and teaching*. Prentice Hall

Cross, D. (1992). *A practical handbook of language teaching*. Prentice Hall

Doff, A. (1988*). Teach English–a training course for teachers* (Trainers' Handbook and Teachers Handbook). CUP.

Dole, J. A., Duffy, G. G., Roehler, L. R., & Pearson, P. D. (1991). Moving from the old to the new: Research on reading comprehension instruction. *Review of Educational Research, 61*(2), 239-264. https://www.jstor.org/stable/1170536

Duffy, G. G. (2009). *Explaining reading: A resource for teaching concepts, skills, and strategies*. Guilford Press.

Ershad, Q. (2015). Developing effective reading skills through authentic texts. *Sci.Int.(Lahore), 27*(4), 3671–3679. https://www.sciint.com/pdf/16990431093671-3679-Qurratulain-Authentic%20columns%20Copy%20(2)%20(1)-1.pdf

Ghonsooly, B., & Loghmani, Z. (2012). The relationship between EFL learners' reading anxiety levels and their metacognitive reading strategy use. *International Journal of Linguistics, 4*(3), 333-351.

Grellet, F. (1981). *Developing reading skills*. CUP.

Harmer, J. (1991*). The Practice of English language teaching*. Longman.

Harmer, J. (2001). *The Practice of English Language Teaching*. Longman.

Harvey, S., & Goudvis, A. (2000). *Strategies that work: Teaching comprehension to enhance.* Stenhouse.

Khadka, B. K. (2007). *Reading comprehension of differentially-able and able students in English texts*. An unpublished master's thesis submitted to Tribhuvan University, Nepal.

Khoshbakht, F. & Gorjian, B. (2017). Using authentic materials in teaching reading comprehension to EFL learners. *Journal of Applied Linguistics and Language Learning 3*(2), 48–54.

Learner, J. (2003). *Learning disabilities- theories, diagnosis and teaching strategies*. Houghton Mifflin Company

Marzban, A., & Davaji, S. (2015). The effect of authentic texts on motivation and reading comprehension of EFL students at intermediate level of proficiency. *Theory and Practice in Language Studies,* 1(5), 85–91. https://dx.doi.org/10.17507/tpls.0501.11

Nuttal, C. (1996). *Teaching reading skill in a foreign language*. Heinemann Educational Books.

Oda, A. H., & Abdul-Kadhim, M.R. (2017). The relationship between gender and reading comprehension at college level. *Journal of Basrah Research for Humanities Sciences, 42* (6), 426–442. https://www.iasj.net/iasj?func=issues&jId=56&uiLanguage=en

Prawira, A. P., & Roswati, R. (2018). The comparison between male and female students' reading comprehension. *Indonesian Journal of Integrated English Language Teaching, 5(*1), 27–36. https://ejournal.uinsuska.ac.id/index.php/IJIELT/article/view/6664.

Pressley, M. & Afflerbach, P. (1995). *Verbal protocol of reading: The nature of constructively responsive reading.* Lawrence Erlbaum Associates, Inc.

Rianto, A. (2021). Examining gender differences in reading strategies, reading skills, and English proficiency of EFL University students. *Cogent Education*, *8*(1), https://doi.org/10.1080/2331186X.2021.1993531

Sijali, K. K. (2016). English language proficiency level of higher secondary level students in Nepal. *Journal of Advanced Academic Research (JAAR*) https://www.researchgate.net/publication/313623816.

Sheory, R., & Mokhtari, K. (2001). Differences in the metacognitive awareness of reading strategies among native and non-native readers. *System, 29*(1), 431-449.

Scrivener, J. (2005*). Learning teaching*. Macmillan Education: U.K.

Ur. P. (1996). *A Course in language teaching practice and theory.* CUP.

Watkins, P. (2017). *Teaching and developing reading skill.* Cambridge University Press. https://esource.cambridge.org/

Yang, Y. F. (2002). Reassessing readers' comprehension monitoring. *Reading in a Foreign Language, 14*(1), 18-42. https:/nflrc.hawaii.edu/rfl

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