A Study of the Effects of Narrow Reading on Incidental English Vocabulary Acquisition

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Abstract. The study investigates incidental vocabulary acquisition during English natural reading through empirical research. First-year English major students from a university were selected as participants. They were tasked with reading simplified adaptations of Jane Austen's classic novels after class, divided into Groups A and B (Group A engaged in narrow reading, while Group B engaged in extensive reading). Both groups underwent vocabulary tests before and after the experiment. Through data analysis, this study reveals the impact of narrow reading and extensive reading on vocabulary acquisition when reading English simplified novels, as well as whether there are differences between extensive reading and narrow reading during the reading process. The conclusions of this research have implications for developing effective strategies for extracurricular English reading and fostering complete vocabulary acquisition among students.

Keywords: Incidental vocabulary acquisition, narrow reading, extensive reading, university students.

1. Introduction

Vocabulary incidental acquisition constitutes a pivotal component in English language learning. Vocabulary, as one of the three essential elements of language, significantly influences one's listening, speaking, reading, writing, and communicative abilities. In China, the predominant approach for vocabulary acquisition among students is rote memorization, characterized by incessant repetition to promote vocabulary learning. However, for intermediate and advanced level students, the conventional method of spending substantial time and effort on rote memorization often yields minimal results, leading to insufficient vocabulary and inappropriate usage issues. Consequently, students' overall English proficiency remains stagnant. Nevertheless, with the continuous development of second language vocabulary acquisition research in recent years, experts in the field generally concur that a significant portion of vocabulary is acquired incidentally through reading. Second language learners can acquire vocabulary under "natural" reading conditions, devoid of any additional vocabulary exercises, which is particularly suitable for intermediate and advanced level students.

In the early 1980s, linguists, including Stephen Krashen, proposed the concept of narrow reading, advocating for a focused approach where readers engage with materials of similar themes, books by the same author, and/or in the same genre. Narrow reading entails the exploration of content that revolves around a cohesive theme, authorship, or literary genre. Conversely, extensive reading promotes the expansion of knowledge by encouraging readers to explore diverse topics and genres. However, the extent to which narrow and extensive reading affect vocabulary acquisition and retention during reading remains inconclusive. Within the realm of second language acquisition, learners are capable of incidentally acquiring vocabulary through reading. Yet, there is limited empirical evidence to determine whether engaging in extensive reading across multiple themes or narrow reading within a singular theme is more conducive to vocabulary acquisition. Therefore, this empirical study seeks to investigate the disparities in incidental vocabulary acquisition between narrow and extensive reading paradigms through rigorous data analysis. The findings of this research endeavor aim to inform the development of constructive extracurricular reading strategies tailored for English majors, fostering learner autonomy and motivation while providing effective pathways for comprehensive vocabulary acquisition.
2. Literature Review

2.1. Narrow Reading

The concept of narrow reading was first introduced by Krashen in 1981 [1]. He posited narrow reading as an effective learning strategy in second language acquisition, wherein learners enhance their reading skills by focusing on multiple works of the same style, theme, or author. According to Krashen, reading similar works benefits learners by exposing them repeatedly to the same vocabulary, grammar structures, discourse features, and background knowledge, thereby reducing the difficulty level of the reading material to some extent (Krashen, 1981).

Practical evidence suggests that narrow reading contributes to improving learners’ reading comprehension, vocabulary size, and interest. Subsequently, Krashen (2004b), based on the comprehensible input hypothesis, pointed out that narrow input, wherein learners concentrate on materials related to one or a few topics and gradually expand, accelerates language acquisition [2]. Through narrow input, students can more effectively grasp vocabulary related to specific topics, as the recurrence of similar topics and genres increases the frequency of encountering vocabulary. This learning approach helps students better adapt to the language structure and style of materials and promotes language understanding by continually enriching and deepening background knowledge. Narrow input enables students to acquire new language knowledge more rapidly within familiar contexts, adapt to the language style of materials, and thereby enhance the efficiency of language acquisition.

Cho and Krashen (1994 & 1995) found that narrow reading can stimulate learners' interest and improve their reading comprehension [3]. In their longitudinal study, Cho and Krashen (1995) initiated with the reading of the "Sweet Valley" series [4]. The participants, Korean learners, read 66 books from the "Sweet Valley" series, 40 issues of the "National Enquirer" magazine, and 4 romance novels by Harlequin within one year. At the end of the experiment, learners were able to read novels at a high level and exhibited strong motivation to learn English, along with a deep interest. Therefore, the study demonstrated that reading books from the same series or genre not only enables readers to choose materials they are interested in but also enhances their reading comprehension skills.

Lian Hongying and Qian Xiaofang (2015) studied the impact of narrow reading on the reading ability of high school students [5]. Through data analysis after experimental research, it was found that narrow reading significantly improved students' reading comprehension and overall language proficiency compared to traditional reading exercises. More importantly, according to questionnaire surveys, narrow reading greatly stimulated students' interest in reading and enhanced their autonomy in learning, which is consistent with the findings of Krashen. Narrow reading allows students to familiarize themselves with relevant backgrounds and reinforces vocabulary through constant repetition. Consequently, it reduces learners' anxiety and boosts their confidence. Narrow reading is a highly operational, effective, and efficient reading strategy in English teaching activities.

Recent research has also revealed that narrow reading as an effective learning strategy has garnered increasing attention from researchers. Discussions on reading teaching in China have also mentioned the method of narrow reading. However, there is a limited number of related case studies, especially regarding the differences between extensive reading and narrow reading, which still require more empirical research.

2.2. Incidental vocabulary acquisition

Based on studies of children learning their native language vocabulary, Nagy, Herman, and Anderson (1985) first proposed the concept of "incidental vocabulary acquisition," suggesting that students engage in extensive reading, leading to substantial incidental learning [6]. Moreover, numerous empirical studies to date have shown that most incidental learning is indeed natural vocabulary acquisition. Schmidt defines incidental vocabulary acquisition as occurring unintentionally during meaningful language use activities or learning tasks, where learners' attention is not focused on vocabulary, unlike intentional learning where students deliberately memorize words
Additionally, researchers generally agree that reading and vocabulary acquisition are closely intertwined. This is because vocabulary is repeatedly encountered during the reading process, thereby facilitating incidental vocabulary acquisition.

In terms of empirical research, there is a wealth of studies both domestically and internationally on incidental vocabulary acquisition during reading. Laufer and Hulstijn (2001) conducted a study on the effects of different reading tasks on incidental vocabulary acquisition [8]. According to their perspective, the amount of time and effort learners invest varies depending on the reading tasks assigned during the reading process, which they refer to as "workload." Parallel experiments were conducted in New Zealand and Israel. The experiments consisted of three groups, all with the same reading objectives but different reading tasks. Due to the variations in reading tasks, the level of engagement of learners differed within each group. From this, they hypothesized that the greater the workload during reading, the greater the amount of incidental vocabulary acquired. They suggested that there is a significant relationship between the workload during reading and the amount of incidental vocabulary acquisition.

Gai Shuhua (2003) conducted a study on the phenomenon of incidental vocabulary acquisition among English majors [9]. The study designed various reading purposes and corresponding reading tasks to examine the effects of learner variables such as vocabulary size and learning strategies on incidental vocabulary acquisition. The experimental results revealed that different reading purposes and vocabulary sizes significantly influenced incidental vocabulary acquisition. Specifically, retelling after reading was found to be more conducive to promoting broader and more enduring vocabulary acquisition than answering questions after reading. Additionally, within the same task, students with larger vocabularies outperformed those with smaller vocabularies. However, the experiment did not find a significant impact of learning strategies on incidental vocabulary acquisition. This study underscores the importance of considering reading purposes and learner variables in promoting vocabulary acquisition among English learners.

In order to investigate whether there are differences in incidental vocabulary acquisition under different conditions, Lei Lei's (2011) study examined the incidental vocabulary acquisition of participants under different vocabulary reinforcement conditions and natural reading conditions [10]. The research findings indicated that when the reinforcement conditions were associated with the semantics of the vocabulary, the effect of incidental acquisition was superior to that under natural reading conditions.

Currently, research on incidental vocabulary acquisition focuses on three main areas. Firstly, there is theoretical research on incidental vocabulary acquisition, including hypotheses such as the Vocabulary Acquisition Hypothesis (Nagy, 1985) and the Input Hypothesis (Laufer & Hulstijn, 2001) [6, 8]. Secondly, there is exploration into the primary factors influencing incidental acquisition, which include learner-related factors, contextual factors, vocabulary input, among others. Research is directed towards understanding the impact of input and output on incidental acquisition, investigating whether intervening in the teaching process by controlling input and output can influence the effectiveness of incidental acquisition. In recent years, there has been a growing trend in both domestic and international research on incidental acquisition, reflecting the increasing attention given to English language teaching and research globally (Song Shunan, 2020) [11].
3. Experimental Design

3.1. Research Questions

3.1.1 Does narrow reading promote incidental vocabulary acquisition?

3.1.2 Are there differences in the effects of extensive reading and narrow reading on incidental vocabulary acquisition?

3.2. Participants

The participants of this study are freshmen majoring in English at a certain university. They belong to intermediate to advanced level English learners, and their learning methods and abilities are representative. Therefore, for the participants, the difficulty of simplified English novels is moderate, ensuring the accuracy of the data.

3.3. Research Tools

3.3.1 Vocabulary Test

To investigate the differences in incidental vocabulary acquisition between narrow reading and extensive reading, and to assess vocabulary retention, a pre-test consisting of 50 English words will be administered to Groups A and B before the experiment. After reading the simplified versions of Jane Austen's novels, "Pride and Prejudice" and "Sense and Sensibility," Group A and Group B will undergo the same 50-word vocabulary test. These 50 words will be selected from the simplified versions of Jane Austen's novels. The selection criteria for target words are as follows: (1) Select words from the vocabulary levels of CET-4 and CET-6; (2) Preferably choose unfamiliar words; (3) Include words with various frequency levels. The words will be ranked from 1 to 50 based on their appearance frequency. Students will be required to write down the Chinese meanings of as many of the 50 target words as possible. Each correct answer earns 2 points, with a total score of 100. After reading the two simplified novels or the corresponding reading materials, students will undergo the vocabulary test, following the same format as the first test.

3.3.2 Reading Materials

Group A (Narrow Reading Group) will read two bilingual simplified English novels, "Pride and Prejudice" and "Sense and Sensibility" by Jane Austen. The total word count of these two books is over 50,000 words, with a vocabulary size between 3000 and 5000, suitable for high-level English learners.

Group B (extensive Reading Group) will be assigned reading materials with a word count of over 50,000 and a vocabulary size between 3000 and 5000, with difficulty comparable to Group A, to serve as the control group for extensive reading.

3.3.3 Vocabulary Test of 50 Words

Fifty words will be extracted from the specified two simplified novels and extensive reading materials, based on the CET-4 and CET-6 standards. The appearance frequency and occurrence times of these 50 words will be recorded and sorted from 1 to 50 based on their recurrence frequency. The selection will prioritize unfamiliar words and include words of different frequency levels. During the experiment, real-time checks of unfamiliar words will be conducted to monitor the reading progress of experimental students.

3.3.4 Data Collection and Analysis

Vocabulary tests will be conducted before the experiment. Each participant must complete a test consisting of 50 target words, selected from the simplified novels. The testing process after the experiment will be the same as the pre-test. Finally, the collected pre-test and post-test data will be organized and prepared using Origin and SPSS data analysis software to identify differences between pre-test and post-test results.
Figure 1. Pre- and Post-test Score Changes (a) Extensive Reading, (b) Narrow Reading

Figure 1 illustrates the comparative analysis of pre-test and post-test scores for both the extensive reading group (Panel A) and the narrow reading group (Panel B). Upon examination of the results derived from this experiment, it is evident that participants in both reading strategies experienced an enhancement in their post-test performance.

The extensive reading group had an average pre-test score of 74.4 points, while the narrow reading group had an average pre-test score of 79.6 points. The average difference between the two groups was 5.2 points, indicating a small disparity. As shown in Table 1, the t-value was 0.819, with a corresponding p-value of 0.438 (> 0.05) (an alpha of 0.05 was chosen as the significance level). Therefore, the experimental results suggest that there is no significant difference in pre-test reading scores between the extensive reading group and the narrow reading group, indicating comparable reading proficiency levels in both groups prior to the experiment.

Table 1. Independent samples t-test on Pre-test between Extensive Reading (ER) and Narrow Reading (NR)

<table>
<thead>
<tr>
<th>Class</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>t</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ER</td>
<td>5</td>
<td>74.4</td>
<td>11.08</td>
<td>4.96</td>
<td>0.819</td>
<td>0.438</td>
</tr>
<tr>
<td>NR</td>
<td>5</td>
<td>79.6</td>
<td>8.87</td>
<td>3.97</td>
<td></td>
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</tr>
</tbody>
</table>

As indicated in Table 2, the average post-test score for the extensive reading group was 80.2, while the narrow reading group achieved an average post-test score of 92.8. The difference in mean scores amounted to 12.6 points, signifying a significant disparity. The statistical analysis yielded a t-value of 2.49 with a P-value of 0.038, which falls below the 0.05 significance threshold. Consequently, the post-test outcomes reveal a statistically significant difference between the students in the extensive and narrow reading groups, illustrating that students in the narrow reading group exhibited greater progress than those in the extensive reading group.

Table 2. Independent samples t-test on Post-test between ER and NR

<table>
<thead>
<tr>
<th>Class</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>t</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ER</td>
<td>5</td>
<td>80.2</td>
<td>8.43</td>
<td>3.77</td>
<td>2.49</td>
<td>0.038</td>
</tr>
<tr>
<td>NR</td>
<td>5</td>
<td>92.8</td>
<td>7.56</td>
<td>3.38</td>
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</table>

4. Summary

Based on the findings from the experimental data, it becomes evident that narrow reading serves as a potent method for enhancing incidental vocabulary acquisition. This approach not only fosters a deeper understanding of the text but also facilitates the acquisition of new vocabulary in a more natural and contextualized manner. By incorporating materials that resonate with their interests and align with specific themes or authors, learners can significantly improve their language competencies. This approach maximizes the educational yield of reading activities. By immersing themselves in materials of a similar theme, genre, or author, learners are able to engage more deeply with the content, thereby promoting a more comprehensive acquisition of vocabulary. Consequently, this method not
only enriches learners' language skills but also instills a sense of confidence and autonomy in their learning journey. Therefore, it is recommended that learners adopt the practice of narrow reading as a strategic approach to vocabulary acquisition and overall language proficiency development. Future research should continue to explore the nuanced impacts of reading strategies on language acquisition to further refine educational methodologies for language learners.

References