

The Impact of English Reading Engagement on the Reading Proficiency of English majors

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ABSTRACT

English Reading Engagement is one of the most elements of improving English reading achievement and influencing reading course teaching quality. Taking 169 English major undergraduates from two universities as study subjects, this study investigated their English reading engagement, based on the English Reading Engagement Scale consisting of three dimensions, namely, affective, behavioral and cognitive engagement, and six factors. With SPSS, the obtained data was subjected to descriptive analysis and correlation analysis. The dimensions and English reading comprehension proficiency were subjected to regression analysis. The result of this survey presents the significant positive correlation between variables. Reflecting on the limitations of English Reading Course teaching, this study probed how to improve English reading engagement, to enhance engagement efficiency, and proposed options to optimize English Reading Course teaching.

KEYWORDS

Affective engagement; Behavioral engagement; Cognitive engagement; English reading proficiency

With increasingly frequent English mobile learning and more and more diverse reading, it is self-evident that Learning Engagement plays a vital role in measuring learners' learning behavior and effectiveness. Since 1980s, the relative research as to the influence of Individual Engagement Changes of College Students on high education lectures quality has been steadily on the increase. Guthrie states that Engagement is multidimensional concept including emotions, behaviors, and cognition^[1]. Crick Deakin defined engagement as various social engagements displayed under different social reading and writing contexts^[2]. In 2019, Delaney et al. conducted the research about mobile learning engagement, they stated that mobile Learning engagement involves a series of subjective and objective factors like self orientation, interpersonal relationships, emotion, social culture and external planning etc^[3]. From the previous literature, we can conclude engagement involves engaging motivation and strategy and profound thinking interaction and emotional communication, having individual, disciplinary and situational differences, so it can be rewired and improved.

English reading course is a very important compulsory course for freshmen and sophomores of English majors, is a integral part of high education. PISA (the Program for International Student Assessment) sorts reading engagement into individual reading engagement and campus reading engagement^[4]. English reading course belongs to campus reading engagement, its teaching quality related closely with English majors' individual reading engagement, namely, reading attitude and concentration degree. From three dimensions reading emotion, reading behavior and reading cognition, and six factors, our paper conducts descriptive analysis about various engagement, and

regression analysis of reading engagement and reading achievement with SPSS, aiming to explore how to improve the students' reading engagement and enhance their reading engagement efficacy to optimize English reading teaching quality.

1 Study design

1.1 Study problems

- (1) What is the overall situation of the Reading Engagement of English majors?
- (2) What is the correlation of Affective Engagement, Behavioral Engagement, Cognitive Engagement and reading proficiency?
- (3) How do we improve students' reading engagement through English reading course?

1.2 Study objects

169 English majors of two universities from Xiaogan, Hubei, China would participate in the questionnaire survey for this study. They are freshmen and sophomores, among them there are 132 female students, 37 male students. They would fill out Reading Engagement Index(REI) questionnaire. As for English reading achievement evaluation, we would take the data from a reading comprehension test and their first CET4 reading comprehension score for analysis.

1.3 Study tools and methods

The tools involved in this survey are three questionnaires and one test. The most important tool for engagement data is Reading Engagement Index(REI) questionnaires whose theory is based on English Reading Engagement Scale for College Students made by Lili and Yang Yiming in September, 2019^[5]. The questionnaires are filled by participants. Validity testing of this questionnaire has been conducted. It has good internal consistency reliability and its Cronbach's alpha is over 0.7. Stability coefficient has also been tested, the correlation coefficient is 0.941. This scale meets the measurement index requirements and has been applied for measuring the non-English majors' reading Engagement, including several engagement impacting factors. The general content of scale is as follow:

REI questionnaires cover three dimensions and thirty items. On average, there are ten items for each dimension. The first dimension Affective engagement composed of two factors, involves students' reading activity, reading materials diversity and their opinions about reading importance. The items, for example, "I am good at English reading"," As English majors, I should make efforts to read", "I feel good when I finished the English originals", focus on the reading attitude, interest and confidence. Behavioral engagement scale includes two factors, namely autonomous reading behavior and interactive reading behavior, investigating students' attention span and persistence while reading and whether they have actively engaged in interaction. Cognitive engagement items contain the strategies of text processing and task management strategies while reading, surveying whether students draw up reading plans and have in-depth comprehension ability like deducing and summarizing. The questionnaire uses Likert 5-point scale format, options 1-5 represent "completely agree" to "completely disagree" in sequence. The higher the score, the higher the engagement.

For each dimension we prepare one questionnaire respectively. For three dimensions 507 questionnaires in total have been distributed for this survey, among them 33 are invalid, there are 474 valid questionnaires. For reading proficiency survey, 169 test papers have been finished by the

candidates, 158 of which are valid. What's more, we have got 158 items of first CET 4 reading comprehension scores.

Table 1 English Reading Engagement Scale for College Students

Dimensions	Factors	Meaning	Examples of items
Affective engagement	Reading motivation intensity	Reading interest, attitude and confidence in reading ability	I am very interested in English reading.
	Reading goal valence	Opinions on reading goal and importance	English reading is an important skill that must be mastered.
Behavioral engagement	Independent reading behavior	Effort, focus, and persistence while reading	I often forget the time while reading.
	Interactive reading behavior	Discussion about the reading materials and sharing with the teacher and classmates	I often answer the open-ended questions regarding the reading text raised by the professor.
Cognitive engagement	Text processing strategy	Cognitive strategies used to promote text comprehension	I often connect the new information with the previous knowledge while reading.
	Task management strategy	Reading plan and monitoring and adjustment of the reading process	While reading I often continuously check whether I have understood the content being read.

To enhance the validity of survey result, semi-structured interviews have been conducted to the students and relative teachers to have a better understanding of the professors' evaluation about the students' engagement and the professors' reading course teaching strategies. At last we undertook quantitative analysis on the data and qualitative analysis on the information provided by the interview.

2 Statistical Analysis

This study applied three statistical analyses, they are (1) Descriptive Analysis (2) Correlation analyses (3) Regression Analyses.

2.1 Descriptive Analysis of English Reading Engagement

With SPSS 26.0, through descriptive statistical analysis of different reading engagement status, the statistics of three dimensions are as follows:

Table 2 Descriptive Analysis Statistics of Reading Engagement (N=158)

Variable	N	Max Value	Min value	Mean	Std. Deviation
Affective engagement	158	4.76	2.56	3.515	0.841
Behavioral engagement	158	4.25	2.05	3.201	0.791
Cognitive engagement	158	4.05	0.68	2.545	1.342

According to the Likert criteria, a mean above 3.5 suggests a high level, however, from table 2, only the mean of Affective engagement is 3.515, over 3.5. In terms of the importance of reading, students generally have a high sense of identification and acceptance for the value of English reading. In terms of Behavioral engagement, it is at a medium level. We can conclude that the students, few of whom participate in the open discussed questions while reading, are passive and lack of initiative. As for Cognitive engagement, the students from the two universities perform not

so well, the mean is 2.545, the min value is 0.68. From the survey about the factors of Cognitive engagement, some students rarely engaged. Majority of the students have no plan for reading, and lack of critical thinking and associative thinking while reading, leading to no in-depth understanding. They may not actively engage in the profound thought and thorough understanding of the content of original novels they read. Without the process of deep thinking, when they finish the reading reports, they focus less on the authors' viewpoint, but based on subjective consciousness, thus, the insights expressed are not profound enough. The Cognitive engagement standard deviation of 1.342 is also relatively high, tending to be discrete, which indicates that personalities may vary among different participants. Some of them search for reading materials online and conduct reading with APP, in this way, it is difficult to achieve immersive reading. Furthermore, students have not got into habit of recording reading reflections regularly.

2.2 Correlation analysis of three dimensions

The data were put into SPSS for Pearson correlation analysis of three dimensions, we can induce the significant positive correlation, see tab. 3.

Table 3 The Correlation of Affective Engagement, Behavioral Engagement and Cognitive Engagement

	Affective engagement	Behavioral engagement	Cognitive engagement
Affective engagement	1	0.733	0.426
Behavioral engagement	0.733	1	0.546
Cognitive engagement	0.426	0.546	1

Table 3 reports the Pearson Correlation coefficients between Affective engagement and Behavioral engagement ($r=0.733$, $p<0.01$), indicating that they are related closely. The result verifies the viewpoint that the relationship between participants' interest in learning and their reading engagement is interdependent. The more interest participants have, the more attention they pay, the better they perform in reading interaction. The correlation coefficient between Affective engagement and Cognitive engagement is 0.426, suggesting that reading affection does not necessarily influence the application of cognitive strategies while reading. However, when the Affective engagement is at low level, cognitive dissonance can also occur in participants, which leads to low level cognitive engagement.

The factors in Behavioral engagement and Cognitive engagement also have correlation. Students with passive reading behavior and weak persistence are less likely to draw up reading plans, or to take the initiative to summarize and generalize the reading materials.

2.3 Regression Analysis of Reading Engagement and Reading Proficiency

We have conducted regression analysis of three different variables and the average of two reading comprehension scores. As Table 4 demonstrates, the factors of English major undergraduates' reading engagement are useful in predicting their reading proficiency. The correlation between Cognitive engagement and reading proficiency is particularly close ($\beta=0.482$). Increase cognitive engagement by one unit, the average score of English reading will increase by 2.857 units. Participants' text processing and task management strategies have a positive predictive effect on English reading proficiency, which shows the importance of cognitive strategies. From the data about the effect of Affective engagement on reading proficiency ($\beta=0.145$, $p=0.011$), the predictive effect is not so great as cognitive engagement. Reading interest and reading goals indeed have effect on the other engagement, the most predictive factor for reading proficiency is still cognitive engagement. Behavioral engagement is also a good predictor of reading proficiency ($\beta=0.192$). Students with high frequency of independent reading behavior and interactive reading

behavior are in the high reading proficiency group.

Table 4 Regression Analysis of Reading Engagement and Reading Achievement

Independent Variable	Reading Achievement			
	B	β	t	p
Affective engagement	1.023	0.145	1.949	0.011**
Behavioral engagement	1.187	0.192	2.902	0.004***
Cognitive engagement	2.857	0.482	5.496	0.000***

3 Study Findings

The improvement of reading proficiency is a product of the coordination of three dimensions: Affective engagement, Behavioral engagement and Cognitive engagement. From the survey of the participants from English majors, compared to low scoring students, the high scoring students have significantly stronger reading motivation and used the cognitive strategies more flexibly. The impact of their Cognitive engagement is greater than that of Behavioral engagement, and greater than Affective engagement. It is Cognitive engagement involving reading strategies that has the most significant impact on reading proficiency. Fewer students with low cognitive engagement are in the high reading proficiency group.

With the popularization of AI and internet, the traditional reading methods have been on the wane. Students' reading engagement is varying with the change of environment. This study demonstrates that English majors' reading engagement could be affected by various factors, among which the subjective factors include the performance and efficacy during autonomous interaction and creation construction. And the role of students' adaptation and adjustment should not be neglected. The objective factors are related with Behavioral engagement and Cognitive engagement, involving reading plans, cognitive strategies, the online and offline reading course resource matching and the universality of reading evaluation strategies and policies. These factors bring about challenges and opportunities for English course teaching.

4 Teaching Suggestions

Analysis shows that the disengaged students are those who typically have lower levels of reading proficiency. There is significant room for students' improvement in various engagement dimensions. The conclusion of this study enlightened the reflection of reading teachers on compulsory reading courses. According to Guthrie & Wigfield, teachers should make reading stimulating and strategic, so their students will be motivated to read more, the students who are intrinsically drawn in reading will be more likely to use cognitive strategies and interact actively^[1].

Now that their whole Cognitive engagement is at low level and they are not likely to make up plans and strategies, it is suggested firstly that English reading teachers put forward more open discussed questions about various texts to cultivate students' critical thinking and boost reading interaction. Strengthen training and reading strategies, guide students with individual differences to plan reading tasks in advance. The reading teaching plan of teachers has an undeniable influence on students' Behavioral engagement and Cognitive engagement. The reading plan should be specific to each week and reading report seminars can be organized regularly.

Second, the students' different personalities, preferences, reading levels and dimensions value should be taken into account when assigning extracurricular reading tasks. Provide diverse and positive evaluations for the completed reading tasks. Padak previously proposed that it is easy to

collaborate with passionate learners who have intrinsic motivation, we have responsibilities to provide authentic reading and writing environment for these learners^[6]. Therefore, it is suggested that schools should create a good reading atmosphere for students to read independently and develop more online and offline interactive learning programs. Thus in a more favorable environment students are able to engage in reading according to their interests and can actively explore suitable reading strategies for themselves. In this way, while promoting cognitive engagement, the affective engagement and behavior engagement will also be improved. In all, intervention measures implemented by teachers' efforts and the resources that college strives to provide are beneficial for students with low reading engagement.

In recent years, there have been a great deal of researches on English Reading engagement, but it is still possible to continue the development research from a comprehensive perspective like engagement quantity, engagement quality, surface engagement and in-depth engagement.

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