A Study on the Promotion of College Students' E-reading Behavior Based on the Reading Behavior of Colleges and Universities

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Abstract: Reading changes people's lives, and the depth of E-reading influences people's lifestyle. This paper takes the promotion and analysis of E-reading behavior as the breakthrough point, takes college students as the analysis object of reading promotion behavior, analyzes the matters needing attention in the process of promoting reading behavior of college students in our country at present, and puts forward some suggestions and measures.

1. Introduction
With the development of Internet technology, e-reading has become a new way of reading, which has greatly changed people's reading habits and lifestyles. But at the same time, problems such as shallow reading and reading entertainment emerge in endlessly, which is not conducive to the establishment of a comprehensive reading atmosphere. College students, as an important group of reading, their reading quality directly affects the cultural and technological construction of our country. Therefore, it is of great significance to study and excavate the reading behavior of college students in order to build a comprehensive reading-oriented country for all. Although there are abundant studies on reading, the research perspectives are mostly reading services, reading forms and so on. From the perspective of sample analysis of e-reading, this paper selected representative universities in Guangzhou to conduct a questionnaire survey, and analyzed the reading behavior, reading needs and reading barriers of college students in China. The structure of this paper is as follows: The first part introduces the current situation of E-reading and college students’ reading in China. The second part adopts empirical analysis to analyze the current situation and trend of College Students’ e-reading behavior in China from the aspects of reading needs, reading methods, characteristics and trends of e-reading. The third part, taking the University Library as the main carrier, puts forward some suggestions and measures.

2. The Current Situation of E-reading Behavior in China

2.1 E-reading Behavior
Reading is a kind of human behavior, and it is a manifestation of readers' psychological, physiological and psychological processes in reading. The so-called reading behavior is a learning process which is motivated by psychological needs and based on senses and has a tendency towards certain reading materials. The patterns of reading behavior are as follows:
In the traditional reading era, reading and paper are inseparable. With the advent of the digital era, digital information content usually needs electronic reading terminals to read. With the rapid development of E-reading industry, e-reading has emerged as the times require, and has gradually become one of the most important reading methods for college students. E-reading is a way of reading. The target of reading includes three elements: e-resources, resources dissemination channels and E-reading terminals. Among them, electronic resources refer to the reader's reading content, including information, text, charts, images, audio and video content. Resource transmission means resource transmission network, which mainly includes wired Internet, wireless communication network and satellite network. E-reading terminal is the carrier of reading content, basic mobile E-reading terminal, including many kinds. Generally speaking, there are mainly electronic reading terminals, such as notebooks, netbooks, tablets, etc. Readers dedicated to reading, such as Kindle reader, Cihai e-reader, Longyuan reader, Jinshu e-reader terminal, communication-based E-reading devices, such as mobile phones, as well as entertainment-based E-reading devices.

2.2 Current Situation of E-reading Behavior in China
In this paper, CNKI China Journal Full-Text Database is selected to search for 519 documents with the keywords of "reading behavior", "electronic reading" and "digital reading". After screening, 76 documents related to university readers' reading behavior are found. According to the analysis and statistics, since 2008, the research on College Students' reading behavior has gradually become a hot topic in academic circles. The research objects in academic circles mainly focus on the research of online reading behavior, reading service and the current situation of College Students' online reading. See the following figure specifically:
Table 1. Research by Reading Topics

| Research topics                          | Number | Proportion |
|------------------------------------------|--------|------------|
| Online Reading Behavior                  | 25     | 33%        |
| Research on Reading Service              | 14     | 18%        |
| A Survey of College Students' Reading Situation | 14     | 18%        |
| A Study of Reading Psychology            | 16     | 21%        |

According to the 42nd Statistical Report on the Development of Internet in China in 2018, as of June 2018, the number of Internet users in China was 802 million. In the first half of the year, 29.68 million new Internet users were added, an increase of 3.8% compared with the end of 2017, and the Internet penetration rate reached 57.7%. China's mobile phone netizens have reached 788 million. In the first half of this year, 35.09 million new mobile phone netizens were added, an increase of 4.7% over the end of 2017. The proportion of Internet users using mobile phones reached 98.3%. The proportion of Internet users using mobile phones in China reached 98.3%, up 0.8 percentage points from the end of 2017.

The 15th National Reading Survey strictly follows the principle of "same caliber and comparability". Three different sets of questionnaires were used to investigate the three age groups of minors (0-8 years old, 9-13 years old, 14-17 years old). The survey found that in 2017, the comprehensive reading rate of all media maintained the growth momentum, and the contact rate of digital reading and the reading rate of paper books increased. The report shows that the development of digital reading has promoted the national comprehensive reading rate and the contact rate of digital reading methods, and the overall reading population continues to increase. In 2017, 5.4% of China's citizens read 10 or more e-books annually, more than 20% of them have the habit of listening to books. The contact rate of digital reading is 73.0%, which is 4.8 percentage points higher than that of 68.2% in 2016. Specifically, 59.7% of adults read online in...
2017, up 4.4 percentage points from 55.3% in 2016; 71.0% of adults read on mobile phones, up 4.9 percentage points from 66.1% in 2016; 14.3% of adults read on electronic readers, up 6.5 percentage points from 7.8% in 2016; 12.8% of adults use Pad (tablet computer). Digital reading increased by 2.2 percentage points from 10.6% in 2016. 63.4% of adult citizens read Wechat in 2017, up 1.0 percentage points from 62.4% in 2016.

Fig.4. Changes in Reading Behavior between 2008 and 2018

From the point of view of the length of people's contact with different media, the length of mobile phone contact per capita is 80.43 minutes, the length of Internet contact per capita is 60.70 minutes, the length of Wechat reading per capita is 27.02 minutes, the length of E-Reader reading per capita is 8.12 minutes, and the length of Pad (tablet computer) contact per capita is 12.61 minutes. According to the survey on the reading quantity of various publications by adults, in 2017, the per capita reading quantity of e-books by adults in China was 3.12, slightly lower than that of 2016, which was 3.21. According to the population distribution characteristics of digital reading, among the adult digital reading contacts in China, 34.6% are 18-29 years old, 26.1% are 30-39 years old, 24.2% are 40-49 years old, and 10.6% are 50-59 years old. It can be seen that 84.9% of adult digital reading contacts in China are 18-49 years old.

3. Sample Analysis of Reading Behavior of College Students in China

In order to understand the characteristics and reading needs of College Students' e-reading behavior under the network environment, a sample of College Students' e-reading behavior in prefectural areas was collected.

3.1 Sample Selection

This paper takes the students of six universities in Guangzhou, including Sun Yat-sen University, South China University of Technology, Jinan University, Guangzhou University of Foreign Languages and Trade, Guangdong University of Technology, Guangdong Institute of Light Industry and Vocational Technology, as the research object, and the basic research methods are questionnaire survey.

The reason for choosing the above six universities is that they are different in nature, at different levels, and have their own prominent characteristics and strong representativeness. The research subjects selected a certain number of undergraduates (including undergraduates, postgraduates and doctoral students) from the six universities mentioned above, and considered the distribution of schools, disciplines, majors, grades and gender, so as to reflect the current situation of College Students' e-reading behavior as truly as possible, so as to provide more comprehensive and reliable information support for subsequent analysis. According to the understanding of the main types of readers' reading behavior and the particularity of E-reading behavior, when designing the content of
the questionnaire, the paper mainly inspects college students' reading needs, reading motivation, reading content selection behavior, reading content acquisition behavior, reading equipment selection behavior, reading satisfaction and so on.

3.2 Sample Statistics and Analysis

According to the principle of objectivity and integrity, six college students were selected to conduct a sample survey. In the actual operation process, 600 questionnaires were sent out by random encounters. Finally, the data were presented and analyzed in the form of statistics. In the specific process of investigation and implementation, 600 questionnaires were distributed, 567 were recovered, and the recovery rate was 94.5%.

Table 2. Basic information table of research subjects

| Educational level | Sun Yat-sen University | South China University of Technology | Jinan University | Guangzhou University of Foreign Studies | Guangdong University of Technology | Guangdong Light Industry Vocational and Technical College |
|-------------------|------------------------|--------------------------------------|-----------------|---------------------------------------|----------------------------------|---------------------------------------------------------|
| Undergraduate     | 78                     | 56                                   | 67              | 45                                    | 67                               | 76                                                      |
| Graduate student  | 22                     | 44                                   | 33              | 55                                    | 33                               | 34                                                      |
| Gender            |                         |                                      |                 |                                       |                                  |                                                         |
| Female            | 57                     | 45                                   | 56              | 47                                    | 55                               | 49                                                      |
| Male              | 43                     | 22                                   | 33              | 13                                    | 65                               | 43                                                      |
| Subject distribution |                        |                                      |                 |                                       |                                  |                                                         |
| Social science    | 56                     | 45                                   | 56              | 47                                    | 55                               | 49                                                      |
| Science and engineering | 44                   | 55                                   | 44              | 53                                    | 45                               | 51                                                      |

According to the results, from the educational level analysis, the respondents are mainly students at the undergraduate level, while the number of Postgraduates (including master's and doctoral) is relatively small. From the gender analysis, there are slightly more boys and the proportion of men and women is basically equal. From the perspective of subject distribution, the number of respondents in Humanities and social sciences is nearly 70%, which basically meets the requirements of questionnaire issuance.

3.2.1 Reading Styles of College Students

The Reading Styles of college students surveyed by this research institute are mainly paper reading and electronic reading. The Reading Styles of college students are compared as follows:

![Fig.5. Comparison of College Students' Reading Styles](image)

The results show that paper reading is still the preferred way of reading for college students, while few students choose "e-reading". It can be seen that college students' readers have potential needs for e-reading. Due to some objective reasons, the needs of this reader have not been well excavated.
3.2.2 Reading Needs of College Students

![Fig.6. Reading Needs Survey of College Students](image)

The survey results show that the main purpose of College Students' reading is to expand their knowledge, accounting for 81.7%, followed by meeting the needs of professional research. At the same time, it can be found that the proportion of leisure and recreation needs is equal to that of professional research needs, and higher than that of career development needs and academic needs. Thus, modern college students have a higher demand for recreational reading after learning.

3.2.3 Types of Electronic Resources Required by College Students

Usually, the electronic resources of University Libraries mainly include electronic books, electronic journals and video resources. However, with the popularity and application of computer networks, readers can easily access electronic reading content from the Internet. According to the survey, the contents of E-reading required by college students are news and information, e-books, e-journals, e-newspapers/magazines, online novels, video resources and audio books. The proportion of college students reading "news and information" is as high as 60%, ranking first in reading. News and information have been widely read, which cannot be separated from the convenience of reading content acquisition under the network environment. At the same time, through the research results, we can see that college students' demand for reading content is diverse.

3.2.4 Characteristics of E-reading Behavior of College Students

Reading behavior is one of the ways to obtain information. Electronic reading has changed the reading content and reading methods of college students with incomparable advantages. It has the following characteristics:

One is the diversification of reading needs. With the development of science and technology, readers' demand for knowledge and information presents a diversified trend. The development of new media not only meets the diversified needs of readers, but also promotes the diversification of readers' needs.

The main manifestation is that there are many types of content needs and a wide range of content needs. Second, the individualization of reading needs. Readers can find electronic content that meets the needs of readers according to their reading habits, reading goals, gender and age of readers. They can also change the background color of books at will according to their preferences and so on. It has become a participatory reading that pays equal attention to both reading and writing. Third, the acquisition of reading content is multi-channel. College students often use mobile phones, e-books and other readers to obtain electronic content provided by businesses. At the same time, the abundant electronic resources on the network provide college students with rich sources of information, which
can meet their e-reading needs by means other than library databases. Fourth, diversification of reading carriers. College students can achieve e-reading through more reading devices. E-reading devices can also provide mobile reading, which can meet the needs of some resources. College students can use the fragments of spare time to achieve reading anytime, anywhere.

4. Promotion Strategy of College Students’ E-reading Behavior

Based on the above investigation and analysis, this paper puts forward the following suggestions and strategies for the promotion of College Students’ E-reading behavior.

4.1 Take readers as the center and strengthen the construction of electronic resources in libraries. The core business of university libraries is to serve readers. College students' reading needs a wide range of purposes, high quality of reading content, and high demand for the renewal of electronic resources. Therefore, in order to understand readers' mobile reading needs and strengthen the construction of reading platform, we can cooperate with database providers and publishers in resource construction, introduce competition mechanism, and introduce them into the electronic resources platform of school libraries, so as to provide an interactive platform for libraries to accurately grasp readers' resource needs. Readers can give feedback on the resources they have read on this platform, or share what they think are good resources for more people to read.

4.2 Improve the environment construction of mobile electronic resources in libraries. In order to speed up the construction of network, we should maintain and update the database resources in time to reduce or improve the speed of network, aiming at the problems of slow network speed and difficult access to electronic resources commonly reflected by college students. According to the needs of readers, resources of different formats are integrated into one platform, so that readers can retrieve resources of multiple databases only on one overall platform. Cooperate with product developers to develop reading terminals for college students, customize special readers according to the characteristics of students, and provide corresponding functions and content requirements for product customization.

4.3 Strengthen mobile reading guidance for college students. It is necessary to guide college students to set up correct reading consciousness, cultivate their reading quality, cultivate good reading habits, and make college students' readers have strong reading desire in their hearts. Strengthen the cultivation of College Students’ technical literacy, guide college students to formulate reading plans around the realization of reading goals, actively explore the meaning of the reading materials, select good reading content, let them enjoy the whole reading process, and obtain the best reading effect.

4.4 Strengthen training to improve readers' reading literacy. Continue to expand the existing depth of training, through users to the library to participate in training and online reference services, organize various content lectures, literature retrieval courses, establish user consultation or education platform and other forms, the library’s reader's guide service through multimedia means to achieve.

5. Conclusion

Although in recent years, various universities have made many attempts in the promotion of electronic reading, the reading rate of college students has increased year by year. However, in terms of College Students' reading guidance, there are slightly inadequate policies and promotional activities. Many college students' reading still stays in the fast-food "shallow reading" stage, and the reading crisis, especially the quality "deep reading" crisis still exists. As one of the main forces of reading, the correct establishment of College Students' reading concepts is of great significance to the promotion of the soft power of national culture and the strengthening of the country by culture. Therefore, taking university libraries as carriers, universities should make good use of new media technology, strengthen the promotion of E-reading behavior, further deepen the reading potential of College students, and
establish a comprehensive reading atmosphere.

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