Research Status of Chinese College Students' English Anxiety Based on CiteSpace Knowledge Graph

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Abstract

In order to systematically sort out and summarize the research on College English Anxiety in China, through selecting the the literatures from 1997 to 2021 in CNKI database, using bibliometrics and CiteSpace knowledge mapping function, displaying the progress, hot spots and main topics of the research on College English Anxiety in China , to find out the problems and to predict the research trends in the field of Chinese College Students' English anxiety. Through "research literature keyword citation mutation", this paper reveals the research hot spots and change trends of College English Anxiety research in different years. In general, the research on College English Anxiety in China is rich in content, but there is a phenomenon of repeated research. The research perspective shows a diversified trend, the core research field is wide, and the research methods of qualitative research, quantitative research and the combination of qualitative and quantitative research are widely used. At the same time, the disciplines are widely distributed, but he cross research with psychology is not deep enough, which has positive enlightenment significance for teaching and research in related fields.

Keywords: College English, anxiety, CiteSpace visual analysis, China

1. Introduction

With the development of globalization, people's attention and enthusiasm for English is constantly improving. College English is a basic course commonly offered by colleges and universities in China. All non-English majors' students must complete the course in the first two years of college. Compared with the time and energy invested, Chinese college students' English ability is still not satisfactory, one of the important reasons is the existence of learning anxiety. Studies have shown that anxiety is one of the main factors affecting academic performance, many scholars have conducted a lot of studies on the correlation between English learning anxiety and academic performance.

Taking 490 literatures in the CNKI database as sample data, Using CiteSpace visualization software, through bibliometrics, citation analysis to analyze the frequency, emergence and cluster co-occurrence of keywords and to explore the theoretical evolution path.

2. Definition

College English

College English is a universal basic course of colleges and universities in China, that non-English majors' students must be completed. According to the "College English Course Teaching Requirements" issued by the Higher Education Department of the Ministry of Education, College English Courses should be integrated into the school's credit system, and try to ensure that they account for 10% of the total undergraduate credits (about 16 credits). It usually takes students two years to complete.

Anxiety

Anxiety originates from the field of clinical research in psychology, is a normal emotion that causes increased alertness, fear, and physical signs, such as a rapid heart rate.

In the 1970s,Dulay and Burt(1977) proposed that emotion can play a filtering role in the learning process. Krashen(1985) proposed the emotion filtering hypothesis that only under the optimal emotional conditions (i.e., learners have strong learning motivation, full of confidence and happiness, and the emotion filtering level is medium)

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can "language acquisition mechanism be established "(LAD)" comes into play. Educational psychologists began to pay attention to the influence of anxiety on foreign language learning in the middle of last century. After more than half a century of rapid development, anxiety has been regarded as one of the most important emotional variables affecting foreign language learning, and has a significant impact on language output and foreign language course performance of foreign language learners (Young 1991; Gardner 1985; Steinberg & Horwitz 1986).Because of its importance, anxiety has become an academic hot spot in foreign language teaching in China in the past 20 years.

CiteSpace Scientometrics Software

CiteSpace Scientometrics Software is used to analyze the changes of disciplinary research frontiers over time and the relationship between research frontiers and their knowledge base, and Co-Citation Clustering is used to visualize the literature information of disciplinary fields, so as to intuitively obtain the theoretical evolution path of disciplines, research hot spots and research frontiers (Chen 2004; Chen et al. 2010).

3. Literature Review

Since the 1980s, the study of Second Language Acquisition has made rapid progress. The traditional research methods of College English Anxiety are mainly through quantitative description and questionnaire survey. Many studies have agreed on the relationship between affective variables in learning and foreign language learning (Young 1992, Gardner 1985; Steinberg & Horwitz 1986). Young(1992:164) believed that language anxiety was negatively correlated with language course scores and teachers' assessment of students' achievements. Kleinmann (1977) found that anxiety symptoms were related to the difficulty of students' oral expression of complex language structures such as passive sentences. Aida (1994) believed that the typical performance of students with test anxiety in class was that they could not concentrate on the teaching content in class. Horwitz (1986) believed that foreign language learning anxiety not only exists among learners, but also non-native language teachers may feel anxiety when using the target language.

Guo Yan, Jin-fen Xu (2014) did a research among 457 non-English major college students,Based on college English classroom and listening, speaking, reading and writing skills. A total of five dimensions of anxiety were analyzed, found that all dimensions are in moderate anxiety, classroom anxiety, speaking, listening, writing, reading anxiety, the anxiety value from high to low in turn, and classroom anxiety is significantly higher than reading and writing, male and female students have significant differences in the spoken language anxiety.

Chen Qiaowei (2014) studied the articles on learning anxiety published in 17 major and core foreign language journals in China from 1999 to 2008, and concluded that the period from 1999 to 2003 was the exploratory stage of the study on English learning anxiety in China. In this stage, the research method was single and the research scope was narrow. From 2004 to 2009, the research on English learning anxiety in China developed rapidly, with scientific research methods and expanded research contents.

4. Methodology

4.1 Data Sources

This paper selects the papers published in China's National Knowledge Infrastructure (CNKI) database (hereinafter referred to as CNKI) as data sources. Taking "College English Anxiety" as the research field.Search criteria:(Topic %=' College English Anxiety 'or topic %=' College English Anxiety' or title= XLS (' College English Anxiety ') or v_subject= XLS (' College English Anxiety '); Search scope: Main Library.A total of 496 results were found, and 490 results were obtained after excluding literatures unrelated to the topic, including 341 papers, 4 reports and 55 dissertations. References were cited from 1997 to 2021.

4.2 Research Methods and Tools

This paper adopts bibliometric method and citation analysis method to carry out statistical analysis. Literature measurement is a method to objectively evaluate the research status and development process of different regions, institutions or authors in a certain field based on quantitative research methods such as mathematical statistics according to the publishing rules of research papers (Chen 2009). Citation analysis method is a bibliometric research method that uses mathematical and statistical methods to compare, conclude, abstract and summarize logical methods and analyzes the citation and cited phenomenon of the analysis objects such as scientific journals, papers and works, in order to reveal their quantitative characteristics and internal laws (Qiu Junping 2007).

5. Results & Fingdings



Figure 1. Number of papers on College English Anxiety published over the years

From figure 1, we can see that related studies began in 1997. And it can be roughly divided into the following stages: the initial stage was1997-2003, the rapid development stage was 2003-2011, in 2011 and 2012, the research basically maintained a balance, and since 2012 until now is in the decay stage.Before 2003, the number of College English Anxiety-related papers was small, but after 2003, the number increased rapidly and reached a peak around 2012, The annual number of articles published is between 50 and 60, attracted attention of a large number of researchers. But after 2012, it showed a rapid decline.



Figure 2. Keyword Clustering



Figure 3. Research hotspots and frontier situation

On the Interface of CiteSpace, set the time interval from 1997 to 2021, and set the time slice to one year. Select the title, abstract, key words and identifiers of the literature as the source of the keywords to generate 12 clustering keywords visualization atlas. Wherein, the number of network nodes (N) is 324, the number of connections (E) is 816, the network Density is 0.0156, the Q of Modularity is 0.5886, which is larger than the general indicator 0.4, and the Silhouette value is 0.8676, which is close to the upper limit 1. The higher the homogeneity of the reflection network, the better the clustering effect.

In Figure 2, literature clustering nodes marked with # indicate disciplines or research hotspots and frontier fields. The thickness of nodes reflect the research time and frequency, while the size and location indicate the research quantity and core degree respectively. It can be seen that the clustering graph is radially distributed as a whole, evenly distributed from the center to the periphery. Through the clustering algorithm, the first 12 clusters are :#0 anxiety, #1 college English, #2 language anxiety, #3 anxiety, #4 emotion, #5 emotional anxiety, #6 listening anxiety, #7 emotional factors, #8 flipped classroom, #9 foreign language anxiety, #10 listening #11 anxiety.

The most cited keyword is "anxiety", and the cluster blocks related to anxiety also involve "college English", "language anxiety", "emotion", "anxious mood", "listening anxiety" and "flipped classroom", while the nodes of other keywords such as "English communication", "English teaching" and "oral teaching" are relatively few.Compared with the other three micro skills, the study of listening has attracted relatively more attention, as #5 emotional anxiety #7 emotional factors were displayed on the picture, some researchers paid attention to the influence of emotional factors. At the same time, researchers also put forward some new ideas on classroom teaching mode, as #8 flipped classroom shown, flipped classroom mode has also caused a boom.the boundaries of clusters are not clear, and some clusters are highly similar.

Research frontier refers to the integration of newly published literature whose research content is closely related to prominent keywords reflecting innovative characteristics and has obvious cross-disciplinary attributes in a certain period of time. According to figure 3,in recent years, network teaching reform, independent learning, cultural input, student concept, emotional education, interdisciplinary are the relatively frontier research field. The organic combination of foreign language anxiety and psychology provides new ideas for anxiety research. For example, Wang Tianjian(2011) applied systematic desensitization and cognitive reconstruction commonly used in psychology to reduce oral anxiety, and Jiang Guiying and Li Chengchen (2017) applied negative emotions, positive emotions and emotional intelligence from positive psychology to second language acquisition. Both are useful explorations.

Through Figure 2&3, it can be found that, on the whole, the research scope of College English Anxiety is wide,

covering listening, speaking, reading, writing, etc, among which, students' and teachers' factors, classroom teaching links, cultural factors and other directions are involved. The causes of anxiety, the study of classroom teaching mode, teaching method and learning method are discussed. Overlapping and repetition phenomena of the main keywords existed, such as about listening research, listening anxiety, listening teaching, listening comprehension, listening strategies, English listening were researched; Teaching classroom research includes classroom anxiety, classroom interaction, classroom teaching, teaching ability, hierarchical teaching and teacher concept. Repeated studies were obvious, but there was a direct correlation between keyword frequency and centrality.

Keyword	s Year St	rength Begin	End	1997 - 2021
Psychological balance	1997			
Psychological change	1997			
Anxiety level	1997	1.35 1997	2001	
Psychology	1997			
Outside pressure	1997	1.35 1997	2001	
Cultural Introduction	1997	1.3 1999	2003	
.istening	1997			
Communicative competenc	e 1997	2.22 2003	2005	
Foreign language learning	1997			
Emotional factors	1997			
Emotional anxiety	1997	1.84 2007	2009	
Dral level	1997	1.93 2009	2012	
Enlightenment	1997	1.9 2009	2010	-
nfluence	1997			-
Classroom anxiety	1997	3.12 2011	2013	
Anxiety	1997	1.68 2011	2013	
istening comprehension	1997	1.45 2011	2014	
Coping strategies	1997	1.24 2011	2012	
College English	1997	2.83 2012	2013	-
Hierarchical teaching	1997	1.74 2013	2014	-
English study	1997			-
lipped Classroom	1997			
earning anxiety	1997			
English writing	1997			
earning motivation	1997			-
Dral Anxiety	1997			
istening anxiety	1997			
Countermeasure	1997	1.66 2019	2021	
Factor analysis	1997	1.26 2019	2021	

Figure 4. Word frequency of top 30 keywords

Through Figure 4, keywords frequency was analyzed, it can be found that before 2001, the research on College English Anxiety was more inclined to psychology, and since 2003, attention has been paid to the influence of cultural factors on College English Anxiety. In terms of listening anxiety, the research focused on the following periods, respectively from 2001 to 2006, 2011 to 2014, and 2019 to present; The studies on oral language anxiety were focused on 2000 to 2012 and 2018 to present; The research on writing anxiety is relatively late, focused on 2015 to 2017 and 2019 to 2021; As for hierarchical English teaching, it was concentrated from 2013 to 2014, and there were related researches on classroom model, teacher anxiety and teaching methods, At the same time, scholars have discussed the reform of learning strategies and teaching methods. In recent years, scholars have paid more attention to the study of writing and the causes of anxiety. At the same time, there have been some discussions on the teacher-student relationship, teaching strategies, teaching models and other aspects of English teaching.

It is basically consistent with the research of many scholars, that second foreign language teaching has changed from the pure pursuit of educational results to the focus on students' emotional factors and variables, and has begun to advocate the learning methods of experience, practice, participation, inquiry, communication and cooperation, strengthen the interaction between teachers and students, give play to the active role of learners, and promote a virtuous language learning cycle of automation and autonomy (Lu Zhijun 2007; Yang Jin 2019). Autonomous class teaching mode of foreign language learners' autonomous learning, and self management ability put forward higher requirements, with goals of learning, learning task is given priority to, further optimize classroom design and the teaching method, pay attention to students' participation, increase the emotional communication between teachers and students, reduce the students' English classroom learning anxiety, to build a harmonious relationship between teachers and students, build good English language learning environment. In addition to learners' own emotional *Published by Sciedu Press* 174 *ISSN 1925-0703 E-ISSN 1925-0711*

variables, foreign language anxiety is also related to language factors, cultural environment and social psychological factors. Communicative intention, learning motivation, classroom feedback, teaching method and teacher-student interaction style have direct influence on the generation of foreign language learning anxiety and efficacy.



Figure 5. Subject distribution and proportion of published papers

From figure 5, Research subjects include foreign language and literature, education management, computer, psychology, etc. Psychology accounts for less than 1%, and the quantity and quality of the researches were not satisfactory.

Although there are interdisciplinary studies, in-depth interdisciplinary communication is not much. And psychology of the depth of the study is relatively scarce.

6. Conclusion

Through the visual analysis of College English Anxiety, the theoretical evolution path, research hotspots and research frontiers of College English Anxiety are illustrated from the clustering and emergence results of keywords.

The results show that :(1) According to the statistics of the annual publications of Chinese College English Anxiety research, the evolution of College English Anxiety has experienced three stages: initial stage, development stage and decline stage; (2) College English Anxiety research focuses on emotional factors, anxiety of different language abilities, coping strategies and etc.; In the past 25 years, there have been different annual research hotspots on College English Anxiety. Network teaching reform, independent learning, cultural factors, student concept, emotional education, interdisciplinary and other fields, are the relatively frontier field, the maintenance time of mutant keywords is only 2 years at the shortest and 6 years at the longest, indicating that the annual research hotspots of College English Anxiety change rapidly and new research trends change rapidly.(3) The research frontier of College English Anxiety focuses on online teaching anxiety, independent classroom teaching reform, cultural factors, teaching skills, teacher-student relationship and concepts under the influence of the epidemic.Compared with psychological research methods, many relevant experimental studies need to be more rigorous and scientific, and the interdisciplinary depth and breadth are not enough, especially the longitudinal studies related to the field of psychology. In the future, More and more scientific empirical studies are expected to reveal the causes of anxiety and the effectiveness of various strategies for alleviating anxiety.

This paper clarifies the historical evolution of College English Anxiety research by understanding the annual number of publications, core research areas, annual research hotspots and development trends of College English Anxiety research in China, and helps researchers to understand the research hotspots and development trends in this field, so as to avoid repeated research in this field. Based on the analysis results, this paper reveals the positive impact of College English Anxiety research on China's foreign language teaching reform, and reflects on the shortcomings of relevant research, hoping to provide reference and ideas for future research to explore new space. However, due to the limitations of the literature sources of this study, further research on this field can be carried out by integrating literatures from different databases in the future, in order to better serve the teaching and research in related fields.

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