

A Review of Research on Error Correction in English in College Entrance Examination in China from 2013-2022

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Abstract

Error correction in English is the constructional question type of the compulsory English test in the college entrance examination, including modification, addition and deletion, and the content involves morphology, grammar and syntax. In this paper, from two aspects of research methods and research content, quantitative and qualitative analysis methods are used to review the research papers on essay error correction in CNKI academic journals. The results show that the research method is single and the research tool is simple. In terms of research content, there are some defects in the depth and breadth of domestic essay error correction research, the proportion of introduction and problem-solving skills is too large, and the proportion of empirical research is insufficient, which needs to be expanded in depth. Finally, combined with the latest development of foreign error correction research, the development direction of the research is prospected from the aspects of research content, level and research methods, and some suggestions and references are provided for future related research.

Keywords

Error Correction; Research Methods; Research Content; Test Validity.

1. Introduction

Error correction in English is a part of English teaching and learning in senior high school, and its proportion in the total score of the senior high school exam can not be ignored. The New Curriculum Standard also clearly emphasizes its significance. Error correction is one of the required test types of college entrance examination. It is a comprehensive test item that integrates many grammar rules and multiple language skills. It has the characteristics of small question type, large flexibility, wide coverage, strong comprehensiveness and multiple test levels. Error correction test is not only to test the grammar knowledge, but also to test the use of language knowledge to solve practical language problems in the process of correcting and writing. Specifically, error correction mainly tests the candidates' ability to find, judge and correct the errors in the essay, so as to test the accuracy of the candidates' comprehensive use of English knowledge in the discourse. The research on error correction in recent ten years mainly focuses on proposition analysis, problem-solving skills and strategies, and content validity. Therefore, this paper takes error correction as the key word, uses qualitative and quantitative research methods to analyze the retrieved papers by searching China Knowledge Resources Database (CNKI), reviews the current situation of domestic error correction researches from the perspectives of research methods and research content, and forecasts the development direction of error correction research from three aspects: research content, research level and research method. Some suggestions and references are provided for future related research.

2. Present Situation of Research on Error Correction in English in China

Error correction is a kind of question type that integrates the examination of grammar knowledge and the application of language skills, and takes the code (language form) as the test object, which is widely used in various types of English tests in China. By setting test points in the text, the question maker requires students to identify and correct errors on the basis of reading comprehension, so as to improve students' awareness of writing self-assessment and correction from the text level [2]. Error correction first appeared in the college entrance examination in 1991. Since 1994, error correction questions, as a tool to measure the comprehensive language application ability, have been applied to the college English test of CET-4 and CET-8 and the unified college Entrance examination. Since 2007, this type of question has been applied to the national College entrance examination English exam. Error-correcting questions have always played a controversial role in English testing, which makes English teachers and learners have ambivalent mind. With the development of this kind of question type, many proposition experts and middle school English teachers have questioned the reasonableness of the setting of English error correction question type in college entrance examination. Some researchers think that the kind of question type itself has design defects: Li Mingkai once pointed out that the question type and the single blank filling and other questions focus on the grammar level, therefore there is a suspicion of overlap. The limitation of the length and content of the essay affect the test validity to some extent, and the shorter length determines that it is not realistic to expect this question type to be examined mainly from the discourse level. After 2007, discussions about its future increased. In 2014, The State Council issued the "Implementation Opinions on Deepening the reform of the Examination and Enrollment System", and Zhejiang and Shanghai took the lead in carrying out the reform pilot, and then a number of provinces began to reform the English question type of college entrance examination, abolishing the error correction questions in the New College Entrance Examination. This trend indicates that the question type is facing the embarrassing reality of being replaced in the college entrance examination.

3. A Review of Research Methods for Error Correction

Among the literature studies on error correction, 44.3% is theoretical (study on error correction reliability and validity), and 55.7% is introduction (study on error correction introduction, error types and problem solving methods). This paper divides short essay error correction empirical papers into three types: quantitative research based on data materials, qualitative research based on interview and observation materials, and comprehensive research combining both methods. Based on the evaluation system of Wu Xudong (2002) and Wingate(2003), Dai Weidong and CAI Junmei combined Lightbown1984 (cited from Wang Jianqin, 2000: 61-68), set eight evaluation indicators (literature review, literature quantity, literature accuracy, research tools, statistical methods, data presentation, theoretical analysis and research recommendations), and quantified the empirical research results from three aspects (research background, research means, and research conclusions). According to the above evaluation indicators, we conducted statistics on the retrieved papers and obtained the information shown in Table 1. As can be seen from Table 1, the vast majority of research is quantitative research (85.7%), and qualitative research and comprehensive research account for 7.15% respectively. Next, we review the empirical research results from three aspects: research background, research means and research conclusions. The more in-depth the literature research in the research background (the larger the number and the more accurate the citations), the more solid the research foundation, the clearer the problems, and the more profound and clear the conclusions (Wu Xudong, 2002). There is a great difference in the amount of literature reference of domestic essay error correction studies: 57% of the studies

did not have literature review, and almost no reference and evaluation of previous research results; From the perspective of literature reference, 71.4% of the studies had few references, 28.5% had medium references, and only 1 study had more than 20 references, accounting for 7.1%. The specific means of research determines the nature of research, and more fully reflects the quality and value of research. Single research means accounted for 64.3%, and the rest were diverse research means. However, it is nothing more than significance test and correlation analysis, and multi-impact factor analysis methods, such as regression analysis, cluster analysis and equation modeling, are not used. It can be seen that the diversification of error correction research methods needs to be improved. Of course, this is closely related to research design, and the fundamental reason is to solve the problems existing in research design. With the involvement of multiple factors, collecting data from different angles and using more than two kinds of investigation tools, we can avoid the disadvantages of collecting a single material in a single scenario and study the problem more comprehensively and deeply. The specific means of research determines the nature of research, and more fully reflects the quality and value of research. Single research means accounted for 64.3%, and the rest were diverse research means. However, it is nothing more than significance test and correlation analysis, and multi-impact factor analysis methods, such as regression analysis, cluster analysis and equation modeling, are not used. It can be seen that the research methods of error correction in short essays need to be diversified.

Table 1. Quantitative evaluation table for empirical research

research nature			quantitative research	qualitative research	comprehensive research	total
quantity			12	1	1	14
research background	literature review	+	4	1	1	6
		-	8	0	0	8
	literature quantity	few(0-10)	10	0	0	10
		medium(11-20)	2	0	1	3
		more(21-30)	0	1	0	1
	literature accuracy	high	4	1	1	6
low		8	0	0	8	
research methods	research tools	single	9	0	0	9
		multiple	3	1	1	5
	statistical methods	single	9	0	1	10
		multiple	3	1	0	4
research conclusions	data presentation	single	9	1	0	10
		multiple	5	0	1	6
	theoretical analysis	+	5	0	1	6
		-	7	1	0	8
	research recommendations	+	5	1	1	7
		-	7	0	0	7

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study of short essay error correction was poor: 78.6% presented the data in a single way, 21.4% presented the data in a variety of ways; The studies with theoretical analysis accounted for 42.3%, and the studies without theoretical analysis accounted for 57.7%. The theoretical depth was obviously different, and few articles reached a certain depth of theoretical discussion. 57.7% of the articles pointed out the direction of future research, and provided a reference for future research.

4. A Review of Research Content for Error Correction

It can be seen from the literature research that in recent years, the errors corrected in the short English essays in the college entrance examination are all 100-120 words in the style of student exercises. The topic is about the things happening around students, the language is simple and easy to understand, and basically does not involve obscure language phenomena and complicated sentence structures. Compared with the old essay error correction, the new course essay error correction has the following characteristics: a. It is presented naturally in the form of essay, with "sentence" as the unit of error setting, the scene is natural, the task is real, but it is more difficult; b. The new essay error correction requires candidates to mark the text directly with symbols, and write the answer directly under the mark, candidates are not easy to make mistakes, and the marking is more intuitive; c. The new essay error correction Settings have three error types: add, delete and modify. Among the 10 errors, there are at most two errors in each sentence, and the Settings of four types: wrong words, multiple words, missing words and correct words in the old essay error correction have been changed.

5. A Review of Test Validity for Error Correction

At present, the research on the proposition quality of error-correcting questions in English short essays is mainly based on the test site validity theory. Test site validity includes the level of test site and the focus factor of test site. Among them, the level of test point refers to what level of context is required to deal with a test point or decide. Focus factors refer to the factors deliberately tested by each test site. The level of test points is divided from low to high into multiple levels of words, phrases, sentences and discourse, and the level of test points contained in question types can directly affect the validity of the whole test question. The higher the level, the higher the validity of test points, which is mainly used to analyze the two types of question types: cloze and error correction of short essays. The focus factors of test points include grammar, idiomatic collocation and meaning factors. Low-level test points tend to focus on language methods while high-level test points tend to focus on meaning. Some domestic scholars (Liu Yanyan, 2018; Li Fenglan, 2018; Xie Chaste, 2018; Based on the test point validity theory, Liu Chao (2019) conducted a diachronic and synchronic study on the correct questions of short English essays in college entrance examination from the aspects of test point hierarchy, focus factors, and test point distribution. By studying the real questions, Xie Chure found that the phrase and sentence test points accounted for the largest proportion, and the number of discourse test points was the least. Liu Chao also reached a similar conclusion by analyzing the 2019 national volume. It was found that phrase-level and sentential levels accounted for 83.33% of the test points, and the focus factors of grammar items accounted for a relatively large proportion, which was in line with the general purpose of paragraph correction emphasizing the accuracy of the test [6]. To some extent, the relevant studies reflect the overall characteristics of the examination level of this type of question, but because most of the studies only refer to the short essay correction questions of a certain year or a few years, they lack the grasp of the development trend.

6. Thinking and Prospect

After studying the literature, this paper puts forward some thoughts. Firstly, the research content needs to be rich. From the macro and micro point of view, the content of error correction research needs to be enriched. On a macro level, most of the existing studies in China focus on the language features of essay error correction and its application to problem solving methods, but ignore the validity study, which is the root of essay error correction test research. The psychological changes of language use and the rules of cognitive development involved in the test have not been paid enough attention. The research on the process of essay error correction testing for Chinese EFL learners needs to be developed. Combined Psychology (Alavi,2005; Adewuya &Adewuya,2006), Cognitive Science (Tartter et al, 2002; Albert et al.,2002), pragmatic (Linscott, 2005), neurolinguistics (Segalowitz & Lane, 2000), pathology (Bellon-Harn et al., 2004) and other disciplines have made more interdisciplinary studies. So as to reveal the test validity of short essay error correction, there is no domestic research in this area. Broadening the existing research ideas is the general trend of test research. This regression of mental cognitive tendency just reflects the dependent characteristics of language testing. At the micro level, there are a lot of discrete studies (mostly comparative studies of two short-text error correction test methods), but a lack of systematic studies (studies on the same variable control of multiple error correction test methods). Secondly, the research level needs to be broadened. Essay error correction, as a means of language testing, involves all kinds of information at the linguistic and non-linguistic levels and the corresponding processing ability. In China, most achievements have been made in the research on the characteristics of essay error correction propositions and problem-solving strategies. However, validity research needs to break through the formal framework and explore a broader development space from the perspective of language function or cognitive characteristics (Tesak, 1994). For example, using the qualitative research method of thinking aloud (Alavi, 2005) to reach deeper levels of validity. Thirdly, the research method needs to be perfected. Empirical research plays an important role in the study of essay error correction. Without empirical verification, any test theory is just a hypothesis. However, the domestic research mainly adopts the non-material method, the material research starts late, the subjective experience color is thick, the lack of objective empirical characteristics.

7. Conclusion

The above is a brief review of the research on essay error correction in China in the past 10 years. It is found that Chinese scholars have not accumulated much empirical experience on essay error correction test. In terms of the research content, there are few studies on the test indexes (validity, reliability, difficulty and differentiation) of essay error correction in China, and the research scope is narrow, and the research breadth and depth need to be expanded. In terms of research methods, literature research and the introduction of problem-solving skills account for the majority, and the proportion of empirical research is seriously insufficient. Although the empirical research has started, the overall research is backward and the method is single. Therefore, the relevant researches on essay error correction testing still need to be further and systematically carried out by Chinese EFL learners.

References

- [1] Anoop Kunchukuttan, Sriram Chaudhury, and Pushpak Bhattacharyya. Tuning a grammar correction system for increased precision. In Proceedings of the Eighteenth Conference on Computational Natural Language Learning: Shared Task. 2014.

- [2] Claudia Leacock, Martin Chodorow, Michael Gamon, and Joel Tetreault. Automated Grammatical Error Detection for Language Learners. Morgan & Claypool Publishers. 2010.
- [3] Hwee Tou Ng, Siew Mei Wu, Yuanbin Wu, Christian Hadiwinoto, and Joel Tetreault. The CoNLL-2013 shared task on grammatical error correction. In Proceedings of the Seventeenth Conference on Computational Natural Language Learning: Shared Task, 2013. pages 1–12.
- [4] Li Chi Kwong, Lyles Seth & Poon Yiu Tung. Error correction schemes for fully correlated quantum channels protecting both quantum and classical information. Quantum Information Processing(5), 2020. doi:10.1007/s11128-020-02639-z.
- [5] S. David Hernandez and Hiram Calvo. CoNLL 2014 shared task: Grammatical error correction with a syntactic n-gram language model from a big corpora. In Proceedings of the Eighteenth Conference on Computational Natural Language Learning: Shared Task. 2014.
- [6] Zhang X. Foreign language anxiety and foreign language performance: A meta-analysis[J]. The Modern Language Journal, 2019.103(4):763-781.
- [7] Wang, C.C., Tseng, W.T., Chen, Y.L. and Cheng, H.F. Classroom Interactions in the Target Language: Learners' Perceptions, Willingness to Communicate, and Communication Behavior. The Asia-Pacific Education Researcher, 2020(29): 393-404.
- [8] Wajnryb, Ruth, Marion Williams & Tony Wright. Classroom Observation Tasks: A Resource Book for Language Teachers and Trainer. (Beijing: Foreign Language Research and Teaching Press, China 2011).
- [9] Huang Fen & Zhu Xiaodong. The Cultivation of Students' Thinking Capacity through English Classroom Questioning. International Journal of New Developments in Education(12). doi: 10.25236/IJNDE.2022.041202.