A Study of Claims and Qualifiers in ESL Students' Argumentative Writing –An empirical study based on Toulmin model

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Abstract

English argumentative writing is a difficult point in second language writing. Although there has been a lot of research on English argumentative writing at home and abroad, empirical research focusing on claims in argumentative writing is very scarce. Based on the Toulmin model, this paper studies the relationship between the types of argumentative sentences and English argumentative writing performance from the perspectives of qualifier and claim. By scoring 117 students' timed argumentative writings, the students' compositions are divided into high-mark group, medium-mark group and low-mark group. Through the text analysis of each argumentative writing, 23 kinds of claims are extracted and scored according to the qualifying elements of the argumentative. The research shows that the claims in the high-mark group are mostly presented by the qualifying elements in the form of words and claims(QW + C), and the claims are mainly constructed in detailed information. At the same time, it is found that there is no significant correlation between the diversity of qualifying elements in claims and argumentative writing performance.

1. Introduction

Writing, as an important language output, can reflect learners' ability to use language flexibly. Argumentative writing is the most challenging type for writing teachers. English argumentative writing plays an important role in all kinds of tests and daily learning. And argumentative writing is a style which can best reflect the process of argumentation. The research on English argumentation in China mainly focuses on lexical level (Jin Yibin, 2013), syntactic level (Lu Xiaofei, 2016, Xu Xiaoyan, Wang Weimin, etc., 2013) and discourse level (Wang Lifei, Sun Xiaokun, 2006; Liu Donghong, 2015). At the university stage, students need to learn how to critically judge, evaluate and respond to the opinions put forward by others, and express their own opinions in an appropriate way (Bridgeman & Carlson, 1983; Feak & Dobson, 1996; Varghese & Abraham, 1998; Liu Donghong, 2020). However, college students generally lack critical thinking ability and logical thinking ability (Hao Yurong, Wang Funing, 2013), so English writing has become the biggest difficulty in college students' English learning. In recent years, there are a lot of articles using Toulmin argumentation model as a framework to study English argumentative writing, but most of them focus on the main body of argumentation such as arguments and counterargumentation (Qin & Karabacak, 2010; Nussbaum, Liu & Stapleton, 2020; Liu Donghong, 2020). There is little research on the beginning of argumentation, that is, the establishment of argumentation and the type of claims. Based on Toulmin argumentation model, this paper mainly focuses on claim and qualifier part in the model, aiming to solve the following two research questions:

1. What types of claims are in College English argumentative writings? Are the type of claims related to the argumentative writing performance?
2. What are the types of claims in the high-mark group of college students' argumentative writings?

2. Literature Review

2.1 topic statement, topic sentence and claim

The thesis statement states the author’s position, belief or viewpoint; it puts forward the purpose of the article and conveys the main idea or theme of the article; sometimes it also indicates how the main viewpoint will be expounded. “Ideally, it is a sentence that can summarize the whole composition (Sullivan, 1984)”. Topic sentence is defined by Ezor & Lewis (1984) as a sentence that “determines the topic of a paragraph and states it”. In English rhetoric it is the sentence “whose assertion is supported or whose meaning is explicated or whose parts are detailed in a paragraph” (Christensen, 1963). Sullivan (1984) believes that this is a summary of the ideas developed in the paragraph, and that a carefully selected topic sentence should be a complete, clear and specific sentence, and should be presented in each paragraph (Popken, 1987).

Miller & Pessoa (2016) analyzed the thesis statements and topic sentence at the same time, trying to find the lack of College Students’ writing in the two aspects. It is found that students tend to overgeneralize the thesis statements and confuse the thesis statements with the topic sentences. Similarly, Zou Tingting’s (2012) research on thesis statements has basically formed a framework for analyzing thesis statements.

Table 1
Types and distribution of arguments (Zou Tingting, 2012)

Making a claim	Types of thesis statements	The manifestation of argument
	1. Coming straight to the point	Question setting method to put forward arguments
	2. First describing the phenomenon, then putting forward the argument	General sentence + sub argument
	3. Listing other people’s opinions first, and then express your own	Argument sentence + reinforcement argument sentence
		Two arguments + choose one / compromise / find another way to make an argument
		Counterarguments + claim
		Phenomenon + claim
		Cushioning + claim
		Coming straight to the point

The concept of claim originates from Toulmin’s argument model (Toulmin, 2003). Argument is a basic assertion put forward by the arguer. It is characterized by controversial truth value, so it is easy to cause controversy (Common, 1998). Usually, a claim is put forward to answer a problem or to solve a perceived problem. A claim can take the form of a proposal or policy statement, an assessment statement, a

definition statement, or a causal relationship, depending on the question or the type of question raised (Ehninger & Brocklede, 1978; Fahnestock & Secor, 1983). It can be the final statement in argumentation, or it can be a transitional statement as a subsequent claim in argumentation.

In recent years, due to the wide application of Toulmin’s argumentation model in various disciplines, the research on claim in the field of second language writing has gradually increased.

Qin& Karabacak (2010) adjusted and modified the original six components of Toulmin model into six new measurement dimensions (claim, data, counterargument claim, counterargument data, rebuttal claim, and rebuttal data). The following scholars used Qin& Karabacak’s analytical framework to study the diachronic development of College Students’ English argumentative elements (Abdollahzadehet al. 2017; Liu Donghong, 2020). This kind of argumentation model can be used to analyze the second language writing, and find the writing style of students’ argumentation and the short board in the argumentation process (Abdollahzadehet al. 2017; Liu Donghong, 2020). However, due to only calculating the number of argumentation elements, rather than evaluating the quality of argumentation elements, there is no actual controllable variable that can enable students to improve their argumentative writing ability.

Since this study adopts propositional writing and requires students to "state their views first", this paper adopts the concept of claim and extracts claims in the first paragraph of the students’ argumentative writings.

2.2 Qualifying elements

According to Toulmin’s definition, qualifier refers to a kind of qualifier such as “probably, possibly, perhaps” (Toulmin, 2003). By limiting an argument, the function of the qualifying element is to make the claim neither too absolute nor too general.

According to Berger’s (2014) analysis of claims, claims are divided into core claims, phrase qualifiers, participle qualifiers and subordinate qualifiers.

Table 2
Classification and examples of defined components (Berger, 2014)

Classification of qualifiers	Examples
Qualifiers in word form(QW)	As far as I’m concerned, the marine parks shouldn’t stay open.
Qualifiers in sentence form(QS)	Though it’s a conflict between our happiness and animals’ sufferings, the marine parks still need to stay open.
Qualifiers in participle form(QP)	Facts provided, I firmly believe that the marine parks should be closed.

Prepositions are followed by nouns, pronouns and gerunds to form prepositional phrases, indicating the relationship between people, things, events, etc. and other people, things, events, etc. There are three forms of non-finite verbs as adverbials: Infinitive, present participle (- ing) and past participle (- ed). Adverbial clause is the most active clause in English, and the modified adverbial clause accounts for the largest proportion. The modified adverbial clause modifies the position of the subject sentence. Many grammar works believe that this kind of clause can be located before the subject sentence or after the subject sentence, and its function and meaning remain unchanged (Shi Xiaohui, 1999). The modified adverbial clause modifies the predicate in the main sentence or the whole sentence, and plays a role of modifying and limiting in the sentence. Berger’s division effectively divides the qualifying elements into phrases, participles and sentences, which can better control the relationship between the determiner and the argument for researchers.

2.3 Toulmin model

Before 1958, the independent development of logic and rhetoric made it difficult for scholars to seek inspiration for improving argumentation from these two disciplines, In 2003, he proposed the limitations of formal logic to science and other disciplines, and put forward the Toulmin argument model. Then, the model has been widely used in the teaching and research of argumentative writing (Crammond J G. 1998, Stapleton P, &Wu Y.2015, Aziz, & said, 2020). Specifically, this framework is widely used to explain all stages of English argumentative writing. According to Toulmin (1958,2003), each argument consists of three main elements (data, warrant, claim) and three secondary elements (qualifier, backing and rebuttal). In argumentation, these six elements do not have to appear at the same time. The author can choose according to the context.

Table 3
Elements and definitions in the Toulmin model

Six elements of Toulmin’s argumentation model	
Claim	refers to the conclusion to be argued for and data denotes the facts or the premises drawn upon as the basis for the claim (Toulmin, 2003, p. 90).
Data	The term data (D) refers to the specific facts relied on to support a given claim(Toulmin, 1984, p. 38).
Warrant	Toulmin (2003) introduced the concept of warrant (W), which serves as the bridge to justify how the claim is derived from the data (p. 91).
Backing	Backing refers to facts, authorities, or explanations used to strengthen or support the warrant (p. 91).
Qualifier	Qualifiers refer to modals, such as probably, possibly, perhaps (Toulmin, 2003, p. 92).
Rebuttal	A rebuttal specifies the conditions which might defeat the major claim (p. 94).

In Toulmin’s view, syllogism in traditional formal logic attempts to sum up the argumentation in all fields of argumentation into a universal formal system, only recognizing the difference between premise and conclusion, ignoring the complexity of argumentation, which is not conducive to our correct

understanding of the actual argumentation in real life, but also confuses the use of language (Yang Ningfang, 2008). Toulmin clearly distinguishes the functional differences of claim, data, warrant, rebuttal and other functional elements, especially distinguishes the clear, factual information-based rebuttal from the hypothetical, inference rule-based warrant, which makes the model more widely applicable in practical argumentation and thus has greater practical significance. Toulmin's argumentation model is widely used in many fields (informal logic, verbal communication, education, etc.), especially in linguistic argumentation.

In the aspect of language learning, Toulmin model is mainly applied to the compilation of argumentative textbooks, scaffolding teaching and the quality evaluation of argumentative writings.

Toulmin model is widely used in a large number of argumentative writing textbooks. Ramage's writing arguments: a rhetoric with Readings (2006), each chapter of the book focuses on a detailed explanation and example of an element in the Toulmin model. Wentzel's a guide to argumentative research writing and thinking (2017). Wentzel integrates the Toulmin model into the teaching of academic English, which provides teachers with new ideas and methods for academic English writing.

2.4 The relationship between argumentative sentences and argumentative essays

Claims are the soul of English essay writing and express the theme of the whole essay. A systematic and detailed analysis of the stylistic features of claims can help students master the writing skills of argumentative sentences (Liu Qi, Cui Ting, 2017). Many scholars believe that claims are closely related to the quality of argumentative writing (Ravelli, 2004; Christie & Derewianka, 2008). Ravelli (2004) believes that students who can predict, position and restate their own discourse are more likely to persuade others in writing. Similarly, Christie & Derewianka (2008) believes that in order to successfully write arguments, students need to manipulate the information flow in lengthy and complex texts, and lay the foundation for the following argumentation by predicting how the text will unfold and deploying strategies at the beginning.

2.5 Theoretical framework of this paper

Based on Toulmin's argumentation model, this paper aims to study the relationship between claims and argumentative writing performance. According to the literature review, from QW, QS and QP as the basis for the classification of qualifying elements, combined with the core sentence (claim) of the author's core point of view in the composition, this paper finds out the possible types of claims that can influence the quality of argumentative writing and analyzes the correlation between these types of and students' argumentative writing, trying to find out some rules of argumentative writing in high-mark writing, so as to provide concrete guidance for writing teaching.

As shown in the figure, based on the Toulmin framework, this paper focuses on the qualifying elements in the claim and their relationship with argumentative writing.

3. Research Methods

3.1 Background and subjects

The subjects were freshmen of a key university in Northeast China, and they were all science and engineering students. There were 88 boys and 29 girls with an average age of 18.3 years. The writing test was conducted in December 2020. The students were asked to write a 150–200 word essay entitled "should the ocean park remain open?" This argumentation was completed in 30 minutes in class. A total of 117 papers were collected for this study.

3.2 Composition review

Two experienced raters scored according to GRE writing standard, and the correlation coefficient was 0.771, showing a high positive correlation. The final score of the students is the average of the two raters.

Table 4
Correlation coefficient of two reviewers' scores

		Composition score1	Composition score2
Composition score1	Pearson correlation	1	.771**
	Sig (double tail)		.000
	N	117	117
Composition score2	Pearson correlation	.771**	1
	Sig (double tail))	.000	
	N	117	117
**The correlation was significant in 0.01 layer (two tailed).			

3.3 Claims marking

Firstly, the researcher extracts argument sentences from the first paragraph of 117 argumentative essays. The main processing information is the background information of the first paragraph. If the background information and the argument form a complete causal chain, then the background information sentence is regarded as a part of the argument sentence. If the background information sentence exists independently of the argument sentence, the background information sentence is removed. Then, according to Berger's (2014) marking method for restrictive elements, researchers annotate the argument sentences in the first paragraph of 117 point compositions.

For example:

In my opinion, I agree to build them. Because I'm concerned that we can achieve it, we can deal with it.
(Example 15)

In my opinion is the restrictive element (QW) at the word level, and the cause clause is the adverbial of cause to modify the central sentence *I agree to build them*. Therefore, the argument type of this sentence is QW + C + QS.

With the demand of people for enjoyment increasing, marine parks are ceaselessly built at a high speed. At the same time many dolphins suffer a lot and even die there. So I hold the view that people should close marine parks and release them to sea.(Example 83)

Because *With the demand of people for enjoyment increasing, marine parks are ceaselessly built at a high speed. At the same time many dolphins suffer a lot and even die there.* constitutes the implicit causal relationship with the claims. So this sentence is classified into the sentence level as QS. The type of claim of this sentence is OS + C.

In my opinion, marine parks are important to our enjoyment and education, it's also a chance to save more ocean animals. (Example 102)

In my opinion (QW), is the qualifying element from the word level. The clause *marine parks are important to our enjoyment and education* and the clause, *it's also a chance to save more ocean animals* are two parallel components. Therefore, the type of claim this sentence is QW + C1 + C2.

3.4 Research process

Table 5
Composition score and proportion of high, medium and low scores

Grouping	Corresponding fraction segment	Number of people
High-score group	12–15	24
medium-score group	9–11	77
Low-score group	6–8	16

After scoring the composition, the author makes statistics according to the score of the composition, the highest score is 15 points, and the lowest score is 6 points. The author divides the composition into high-score group (12–15 points), medium-score group (9–11 points) and low-score group (6–8 points).

As shown in the figure, there are 23 kinds of claims in the 117 compositions. In order to answer the research question (1)What types of claims are in College English argumentative writings? Are the type of claims related to the argumentative writing performance? According to Berger (2004), qualifying elements in sentence and participle forms(QS,QP) as major qualifiers are scored 2 points each, while qualifying elements in word forms(QW) as minor qualifiers are scored 1 point. Each claim is scored 1 point. For example, the claim of QS + QS + QW + O type is scored as 2 + 2 + 1 + 1 = 6. Next, we calculate the complexity of claims and analyze their correlation between argumentative writing performance.

Table 6
Statistical analysis of argumentative writing and claim type description

	Average	Standard Deviation	N
Argumentation score	10.39	1.681	117
Type of claims	3.487	1.2973	117

Table 7
Correlation analysis of argumentative writing and claim types

		Score of argumentative writing	Types of claims
Score of argumentative writing	Pearson correlation	1	-.093
	Sig (double tail)		.321
	N	117	117
Types of claims	Pearson correlation	-.093	1
	Sig (double tail))	.321	
	N	117	117

As shown in Table 6 ($P = 0.321$, greater than 0.05). From this we know that the diversity of argument types has no correlation with argumentative writing.

Table 8
Types of argument sentences with high frequency

Type	Patterns	Number	The average score of the corresponding composition
Type1	QW + C	22	11.09
Type2	QS + C	14	9.5
Type3	QS + QW + C	13	9.08
Type4	QW + C + QS	12	10.17
Type5	QS + QS + C	8	9.75
Type6	QW + C1 + C2	7	10.42

Based on the above results, the corresponding argumentative sentences of compositions with more than 10 scores are QW + C (11.09), QW + C1 + C2 (10.42) and QW + C + QS (10.17).

Table 9
Examples of argument types corresponding to high score compositions

QW		C	N
As far as I'm concerned,		the marine parks shouldn't stay open.	3
From my perspective,		It's right for marine parks to stay open.	6
QW	C1	C2	
In my opinion,	marine parks need a change.	They should not to keep large sea animals, for these animals, for the environment and last of all, for us.	41
From my perspective,	the marine parks could stay open	and we should do other efforts to improve the condition.	55
QW	C	QS	
In my opinion,	I agree to build them.	Because concerned that we can achieve it, we can deal with it.	15
	we'd better cut down the number of marine parks,	which means more animal can get freedom.	22

We can conclude that the types of claims corresponding to high score compositions begin with QW. All of authors of the three types of begin their claims with phrases expressing personal positions (for example, as far as I'm concerned, in my opinion, from my perspective,), which show that authors themselves have a clear understanding of argumentative writing. They begin their argumentative writing with the qualifying elements of their positions, separated from the previous background information. In this way, we can get straight to the point and directly enter the first part of the argument. In other words, the authors of these argumentative essays convey clear position information to the readers at the beginning of the article, which also confirms that good articles require the authors to have reader awareness (Kirsch, G. & Roen, 1990, Holliday & Yore, 1994).

4. Discussion

It is found that there is no direct relationship between the types of claims and argumentative writing performance. This may have a direct relationship with the domestic education model of paying too much attention to examinations and the teacher centered education tradition. The current English writing teaching overemphasizes the product teaching method but ignores the whole writing process (Yue Liangjun, 2017). As a result, students' writing ability and thinking ability can not be effectively improved. In China's English exam oriented environment, college students are mainly faced with CET-4 and CET-6 and postgraduate entrance examination. Writing teachers often ask students to recite and imitate "model essays", which will lead students to focus too much on how to change sentence patterns and overuse difficult vocabulary in order to attract the attention of the examiners, hoping to get high scores, but this is not the case This paper discusses the essence of argumentative writing. And the research shows that the

writing template can not provide the necessary and accurate writing knowledge and skills, and can not significantly improve the English writing level of College English writing learners (Chen Yinghong, Xie Jingrui, 2012).

The result of composition is not related to the type of restrictive elements in argument sentences, which may be that students put most of their energy into the discussion in the middle paragraph.

The most frequent types of argumentative sentences are QW + C, QW + C1 + C2, QW + C + QS, and most argumentative sentences in high score compositions begin with QW + C, which is contrary to the result of Lan Tinghui's (2012) corpus study that low-level learners overuse in my opinion chunks, much more than high-level learners. Hinds (1990) proposed that the writing style of Oriental language is different from that of western language. He believes that in Oriental writing, the author expects readers to "read between the lines" and interpret the author's intention. This also explains that most of the argumentative sentences in this study have more restrictive elements and the argumentative sentences are relatively euphemistic, because the author expects readers to focus more on the middle paragraph. And Chinese culture appreciates every individual who obeys the group. Because of this group based cultural values, Chinese people often hide their own views, which leads to the indirectness of writing (Scollon & Scollon, 1997, 2000).

In the students' Argumentative sentences, the number of QS before the core argumentative sentence is more than that of QS after the core argumentative sentence. This is consistent with Lin Jing's (2019) finding that prepositional adverbial clauses are significantly more than postpositive ones. Students often use modifying elements of sentence form in writing (65.0%), which is contrary to Zou Tingting's (2012) "Chinese ESL students use simple sentences in argument sentences".

Limitations

The research object is only a university in Northeast China, which is not enough to represent the level of the whole Chinese college students. In addition, the sample size is 117, the number is not enough, and the selected two classes are the English experimental classes in the University, which are the best ones through the examination. Therefore, it is not enough to explain the problem. In the follow-up research, we should expand the sample size and collect data from all over the country, so as to find out the essential problems in college students' argumentative writing more comprehensively.

5. Conclusion

In the common exam oriented writing of Chinese college students, argument sentence is the beginning of an argumentative paper and plays a leading role in the whole paper. This paper answers the above two research questions through the research findings.

First, in Chinese college students' Argumentative Writing, the argumentative sentences are mainly composed of phrase modifiers. The types of argumentative sentences are diverse, and the majority

(72.6%) of them are limited. And the type of argument sentence has no direct relationship with argumentative writing.

Second, the characteristics of argument sentences in Chinese college students' Argumentative Writing are as follows: to the point, straight to the theme. The position is clear and the argument is detailed, which shows that the argument is further supplemented with new information, presenting as "double argument form". Adverbial clauses, as restrictive elements, are usually placed after argument sentences as supplementary information. Combined with the research findings, it can be seen that the argumentative sentences in Chinese college students' Argumentative Writing tend to consolidate their own position and increase the credibility of their views, which is conducive to the development of the formal argumentation in the middle paragraph.

In the teaching of argumentative writing, if teachers can better understand the form of argumentative arguments with high scores, and let students understand these factors, such as adverbial clause postposition is closer to the language habits of native speakers, so that students' writing is more authentic and closer to native language learners. Teachers can also guide students' writing, which plays a positive role in teaching argumentative writing and students' second language writing.

Theoretically, this study breaks through the single argumentation mode of Toulmin model, and takes phrases, participles and sentences as the limiting elements. From these dimensions, it expands the model and makes Toulmin model more practical in the field of second language writing.

Abbreviations

QW=qualifiers in word form

QP=qualifiers in participle form

QS= qualifiers in sentence form

C=claim

C1=claim1

C2=claim2

N=Number of the argumentative writing

Declarations

Availability of data and material

The datasets analyzed during the current study are available from the corresponding author on reasonable request.

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Competing interests

The author declares that no potential conflicts of interest with respect to the research, authorship, and publication of this article.

Authors' contributions

YR carried out all the work in this essay writing process, including the design of the study, statistical analysis and writing the manuscript.

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References

- [1] Abdollahzadeh E, Amini Farsani M, Beikmohammadi M. Argumentative Writing Behavior of Graduate EFL Learners [J]. *Argumentation*, 2017.
- [2] Aziz, F. I. B. A., & Said, S. B. M. Developing a persuasive writing model for secondary school [J]. *Educational Research for Policy and Practice*, 19(117). 2020.
- [3] Berger R E. *A Scientific Approach to Writing for Engineers and Scientists* [M]. 2014.
- [4] Bridgeman B, Carlson S. Survey of Academic Writing Tasks Required of Graduate and Undergraduate Foreign Student [J]. *Ets Research Report*, 1983, 1983(1): i–38.
- [5] Christensen, F. *Notes toward a New Rhetoric* [M]. New York: Harper and Row, 1967.
- [6] Crammond J G. The Uses and Complexity of Argument Structures in Expert and Student Persuasive Writing [J]. *Written Communication*, 1998, 15(2):230-268.
- [7] Christie, F., & Derewianka, B. *School discourse: Learning to writing across the years of schooling* [M]. London: Continuum, 2008.
- [8] Chen Yinghong, Xie Jingrui. Comparison of teaching value between College English writing template and classic model [j]. *Journal of Hunan Institute of Engineering (SOCIAL SCIENCE EDITION)*, 2012 (04): 56-60
- [9] D Ehninger, Brockriede W. *Decision by debate* [M]. Harper & Row, 1978.
- [10] Edwin E. & Jill L. *From paragraph to essay* [M]. McGraw Hill Higher Education, 1984.

- [11] Fahnestock J,& Secor, M. Teaching argument: A theory of types[J]. College Composition and Communication, 1983, 34, 20-30.
- [12] Feak C, Dobson B. Building on the Impromptu: A Source-Based Academic Writing Assessment [J]. College esl, 1996
- [13] Hao Yurong, Wang Funing. Problems and Countermeasures in college students' English writing [J]. Educational theory and practice, 2013 (30): 62-63
- [14] Hinds J. Inductive, deductive, quasi-inductive: Expository writing in Japanese, Korean, Chinese and Thai. 1990.
- [15] Holliday W G, Yore L D, Alvermann D E. The reading–science learning–writing connection: Breakthroughs, barriers, and promises [J]. Journal of Research in Science Teaching, 1994.
- [16] Jin Yibin, zhailiangyi. An analysis of the vocabulary characteristics of College Students' Argumentative Writing [J]. New West, 2013 (4):152-153
- [17] Kirsch G , Roen D H . A Sense of audience in written communication [M]. Sage 1990.
- [18] Lan Tinghui. A comparative study of the use of corpus based Chinese English learners in my opinion chunks [D]. Northwest University of agriculture and forestry science and technology, 2012
- [19] Lin Jing. A corpus based study of the placement of concession adverbial clauses in academic English [D]. China University of mining, 2019
- [20] Liu Donghong. The change of Chinese English learners' argumentation Schema – a longitudinal study based on Toulmin model [J].2020, 43 (6):793-805
- [21] Liu Donghong, Chen Yan. A study on the relationship between paragraph commitment and rhetoric of English learners [J]. Modern foreign language, 2015, 038 (004): 534-544
- [22] Liu Qi and Cui ting. A study on stylistic features of English essay argument sentences [J]. Shenhua, 2017:83
- [23] Liu F, Stapleton P. Counterargumentation at the primary level: An intervention study investigating the argumentative writing of second language learners [J]. System, 89.
- [24] Lu Xiaofei, Xu Qi. Second language syntax complexity analyzer and its application in the study of second language writing [J]. Foreign language teaching and research, 2016, 048 (003): 409-420
- [25] Miller R T,Pessoa S. Where's Your Thesis Statement and What Happened to Your Topic Sentences? Identifying Organizational Challenges in Undergraduate Student Argumentative Writing [J]. Tesol Journal, 2016.

- [26] Nussbaum, Michael E. Using Argumentation Vee Diagrams (AVDs) for Promoting Argument-counterargument Integration in Reflective Writing [J]. *Journal of Educational Psychology*, 2008, 100(3): 549-565.
- [27] Popken, R. L. A Study of Topic Sentence Use in Academic Writing [J]. *Written Communication*, 1987, 4(2):209-228.
- [28] Qin J, Karabacak E. The analysis of Toulmin elements in Chinese EFL university argumentative writing [J]. *System*, 2010, 38(3):444-456.
- [29] Ramage J D. *Writing arguments: a rhetoric with readings* [M]. Allyn and Bacon. 2006.
- [30] Ravelli L J. Signalling the organization of written texts: Hyper-Themes in management and history essays [J]. *Matraga - Revista do Programa de Pós-Graduação em Letras da UERJ*, 2004, 18(28):104-130.
- [31] Scollon. R. & Scollon, S. *Intercultural communication: a discourse approach* [M]. Foreign language teaching and Research Press, 2000.
- [32] Scollon. R. & Scollon, S. Point of view and citation: Fourteen Chinese and English versions of the 'same' news story [J]. *Text & Talk*, 1997.
- [33] Shi Xiaohui. Analysis of the factors restricting the position of adverbial clauses [J]. *The law of the times*, 1999 (02): 78-80
- [34] Stapleton P, Wu Y. Assessing the quality of arguments in students' persuasive writing: A case study analyzing the relationship between surface structure and substance [J]. *Journal of English for Academic Purposes*, 2015, 17:12-23.
- [35] Sullivan, K.E. *Paragraph practice* [M]. Macmillan Publishing, New York, 1984.
- [36] Susheela, A, Varghese, et al. Undergraduates arguing a case [J]. *Journal of Second Language Writing*, 1998.
- [37] Toulmin, S. *The Uses of Argument* [M]. Cambridge University Press. 1958/2003.
- [38] Wang Lifei, Sun Xiaokun. A comparative study of demonstrative language corpus in College English argumentative papers [J]. *Modern foreign languages*, 2006, 29 (002): 172-179
- [39] Wentzel A. *A Guide to Argumentative Research Writing and Thinking* [M]. 2017.
- [40] Xu Xiaoyan, Wang Weimin, Xiong Yanyu, et al. A study on syntactic complexity of English argumentative papers of Chinese English Majors [J]. *Foreign language teaching and research*, 2013, 045 (002): 264-275

[41] Yang Ningfang. The significance and reflection of the logic of turmin’s argumentation [J]. Journal of Chongqing Institute of Technology (SOCIAL SCIENCE EDITION), 2008 (10): 29-32

[42] Yue Liangjun. The application of process writing teaching method and portfolio evaluation in the teaching of English writing in No.1 high school. Sichuan Normal University, 2017

[43] Zou Tingting. A study of argument sentences in college students’ English argumentative papers[D]. Huazhong Normal University, 2012

Figures

Figure 1

Toulmin argumentation model (Toulmin, 1958, 2003)

Figure 2

The theoretical framework of this paper

Figure 3

the structure of this paper

Figure 4

Distribution of argument types

Figure 5

Proportion of argument types