Use Of Medical English Writing Corpus Among Contemporary Chinese Medical Students: A Needs-Based Analysis

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ABSTRACT
The current research paper attempts to expose and analyze the general situation and the need for using medical English writing corpus among contemporary Chinese college medical students. At the same time, it makes efforts to uncover how to meet its needs. One hundred medical students participated in the research and were asked to answer questionnaires purposefully designed to collect comprehensive data regarding medical English writing corpus use. The current research results have shown a strong need to use medical English writing corpus among contemporary Chinese college medical students, as well as a severe lack of guidance from medical teachers in Chinese medical universities. Thus, this research further suggests that medical teachers should also guide medical students to meet the needs of selecting proper medical English writing corpus sensibly in their language learning process.

1. INTRODUCTION
Corpora, for language learners, have always been an indispensable tool when they learn languages (Fu & Luo, 2012). However, when Chinese college medical students are studying medical English, even though the role of a medical English writing corpus becomes much more critical, there is a severe lack of proper medical English corpora accessible for use. Whether there is a medical English writing corpus of their own or a medical English writing corpus suitable for them, it has played a significant role for Chinese college medical students in their medical English learning practice.

Research on the use of English medical corpora worldwide, which began in the 1960s, has provided countless reference experiences and guidance for many medical English writing corpus users (Liang, Li, & Xu, 2010). Nevertheless, in China, which has a large population base, or in other words, which has a large number of medical students, there is very little research on the use of medical English corpora.

Especially in the new era of the 21st century in China, many problems and difficulties regarding the use of medical English corpora have also continued to appear. In other words, there is very little relevant research that has explored issues including what the needs for the use of medical English writing corpus are among contemporary Chinese college medical students as well as how to meet the requirements for current medical students in Chinese...
universities, ultimately helping them effectively use their own medical English corpora and promoting their medical English learning practice (Tang, Li, & Tang, 2011).

The situation above related to the use of medical English corpora also deeply reflects the urgent needs and demands of Chinese college medical students in their current medical English learning process. As mentioned earlier, research on medical English corpora worldwide started in the 1960s, mainly aiming at the effectiveness and strategies of medical English writing corpus use in medical English learning.

In the meantime, compared with the research on the use of medical English corpora abroad, there is almost no research on the issue in China. This has finally led to a situation in which most Chinese college medical students’ needs or demands for the use of medical English corpora have become stronger and stronger, making the problem more and more serious.

By analyzing the needs of a group of people or what is embedded in an issue, we can help researchers see the manifestation of the related problems more clearly. To specify intuitively, the results of the current research have shown a strong need to use medical English writing corpus among contemporary Chinese college medical students and a severe lack of guidance from medical teachers in Chinese medical universities. In that case, the current research further suggests that medical teachers should also guide medical students to meet the needs of selecting proper medical English writing corpus sensibly in their language learning process.

Based on the results obtained from the current research, the needs of Chinese college medical students have triggered the problems to be mainly reflected in the following aspects. First, not every Chinese college medical student has at least one medical English writing corpus of their own. And then, not every one of them does have relevant medical professionals to guide them to know how to correctly choose one medical English writing corpus that suits them properly (Yong, 2013).

Finally, and most importantly, not every one of them embraces relevant organizations or institutions to provide necessary training programs or training courses to guide them on correctly and flexibly using their medical English corpora once or if they already have.

2. LITERATURE REVIEW

There are, in general, three parts to the literature review, including a basic introduction to the use of the medical English writing corpus among Chinese college medical students and a theoretical focus on the knowledge of needs analysis and its relationship with language learning.

2.1. Use of Medical English Writing Corpus
2.1.1. Medical English

To put it simply, the so-called “Medical English” refers to a manifestation of the relevant application of English in medical disciplines. Since medical English is the way to use English as a language in medical subjects, medical English is not only a professional course but also a professional major. The learning and application of medical English knowledge are the same as the learning of the language of English (Ma & Jin, 2008). Thus, a comprehensive study of medical English includes medical English listening, medical English speaking, medical English reading and writing, etc.

Medical English, as a form of language learning, is also a knowledge that most medical professional learners must predominate and master. Medical English plays an essential role in the language learning process of most medical professional learners (Wang, Shang & Li, 2009). For instance, medical learners who have mastered a certain degree of medical English can better apply their medical English knowledge and read and understand different versions of English medical literature more easily. This can also more effectively promote the continuous improvement of the medical English knowledge storage and its application ability of most medical professional learners.

2.1.2. Medical English Writing Corpus

A medical English writing corpus is a tool for medical English learners to provide medical English knowledge and references, acting as a medical English knowledge database. We all know that an English medical dictionary is a reference book for words and phrases to provide phonology, meaning, explanation, sample sentences, usages, and so on, which has shown us how vital a medical English writing corpus is for learners of medical English knowledge (Yong, 2013). At the same time, such a medical English writing corpus is also essential for most medical professional learners.

It is known to all that to meet the needs of social development in today’s world, the number of dictionaries has increased rapidly, and dictionaries for different topics, different industries, and different purposes have been developed. The situation of medical English corpora is no exception; medical English corpora are also divided into many types with various topics according to medical majors or medical applications.

2.1.3. Use of Medical English Writing Corpus

Speaking of corpus use, we all know that a language corpus has always been an indispensable tool in learning languages. Especially when language learners are learning a foreign language, using a corpus is essential. In the past, many researchers have explored how to promote foreign language learning through the effective use of language corpus. All over the world, many countries have already studied the general situation of English language corpus use a long time ago, which focuses on the effectiveness and strategies of using an English language corpus in the process of English language learning.
However, in contrast, compared with the research on the use of English language corpus, there is less research on medical English corpora among medical learners. Moreover, many existing studies focus on general English corpus use, while the use of specialized corpora, including medical English corpora, is relatively rare (Zhu & Li, 2013). For example, the majority of medical learners generally lack an understanding of the use of medical English corpora. Therefore, given such a situation, the current research aims to provide reference information for the compilation and the use of medical English corpora as well as for medical English teaching using investigating the actual situation of the use of medical English writing corpus among contemporary Chinese college medical students.

2.1.4. Use of Medical English Writing Corpus among Chinese College Medical Students

Using a medical English writing corpus is indispensable to Chinese college medical students’ learning medical English knowledge. Similar to the situation around the world, most Chinese college medical students also have a lot to consider in terms of using a medical English writing corpus. Although most Chinese college medical students understand the importance of using a medical English writing corpus, they still do not pay enough attention to how to use a proper medical English writing corpus accordingly.

Wang, Shang, and Li (2009) have always suggested that the use of a medical English writing corpus among Chinese college medical students lacks a sort of guidance from relevant professional medical teachers. It has ultimately led to the eagerness of Chinese college medical students to get advice in this regard. This is because they know deeply that as medical learners if they can learn some corpus strategies to strengthen the learning of their medical English knowledge, it will be able to help them better use the resources of medical English corpora actively. It will finally transform the general use of medical English corpora among Chinese college medical students from an inactive status to a positive one (Zheng, 2016; Zhu & Li, 2013).

2.2. Needs Analysis

The definition of “Needs Analysis (NA)” has once been made by Dingfang Shu (2004) as follows:

‘...it is a technique and method for researching needs through introspection, interviews, observations, and questionnaires.’ (Shu, 2004: 82)

In general, needs analysis belongs to the empirical investigations and studies category. The needs analysis done by people is to understand the needs of the target environment, the inner needs of the targets, and the needs of the targets’ expected changes in the external environment, to finally find out the problems in the investigations and studies, guiding the needs-based research as well as improving the needs-based analyses.

It is precise because needs analysis has outstanding application value in various fields in this new century. It has been widely applied in many areas, including the economy, education, and culture. As a language educator and researcher, the current researcher of this research
has also profoundly felt the impact of needs analysis on language education (Tang, Li & Tang, 2011).

For example, in language education, needs analysis plays a pivotal role in foreign language education. Research of needs analysis has long development history and has formed a relatively complete theoretical framework and system. There is also a big gap between the research and needs analysis discussions in China and abroad.

To a certain extent, this also shows that needs analysis research abroad is more comprehensive and systematic than in China. Moreover, most of the needs analysis research is empirical survey research, which also reflects the fact that the research level of needs analysis among Chinese researchers is far behind that among foreign researchers.

2.2.1 Needs Analysis around the World

The researcher of the current study believes that in the development process of needs analysis research abroad, based on the concept of needs analysis, the theoretical framework of target needs analysis, and the technical means of needs analysis, the study and development process of needs analysis can be generally divided into several periods. In total, there are four stages, including the budding period of research (from 1500 to 1920), the rising period of research (from 1920 to 1977), the development period of research (from 1977 to 2000), and the stable period of research (from 2000 till present).

Firstly, in the budding period of needs analysis research (from 1500 to 1920), Richards (2000) has ever pointed out that at the beginning of the 16th century, under the influence of European political changes and economic development as well as the Renaissance (from 14th century to 16th century), the dominance of Latin was threatened and was gradually replaced by French, Italian and English. Since then, based on that particular situation, language education has generally risen, and needs analysis research has entered the budding research period.

Secondly, in the rising period of needs analysis (from 1920 to 1977), Howatt (1984) pointed out that in the 1920s, the concept of “Needs Analysis (NA)” was put forward for the first time, and the needs survey was conducted for the first time as well. Thus, the research on needs analysis was continuously improved through different survey results. The clarification of the concept of needs study marks the official opening of the curtain of needs analysis research.

At the same time, applying the needs survey results to improve language education also created a precedent for the language learning needs analysis research method. Taba (1962) was the first to incorporate needs analysis into a language teaching curriculum. It was also proposed that the language curriculum follow seven steps, which is the first step for establishing such an important guiding position of language learning needs analysis for language education. These research results have significantly impacted the subsequent analysis of language learning needs and have also been recognized by many language education experts and scholars.
Thirdly, in the development period of needs analysis (from 1977 to 2000), the theoretical framework and research methods of needs analysis have gone through more than 30 years, from being proposed to being perfected. This period is also the full application of needs analysis research in different disciplines. In particular, research on English learning needs analysis was the main focus (Chan, 2001; Wang, 2000). The research content was complicated, and the research results were relatively wealthy, which made it called the development period.

Finally, the stable period of needs analysis refers to continuous and rapid development from 2000 to the present. During this period, with the constant maturity of needs analysis techniques and methods, many foreign scholars conducted empirical research based on needs analysis (Chen, 2009; Ma & Jin, 2008). For example, in language education, Fiore (2000) has used interviews and questionnaires to analyze the Italian needs of the elderly in the Italian residential area of Sydney, Australia, as well as those engaged in elderly services from the perspective of language learners. And it is shown that there is a great need for language learning, and it is necessary for the service staff to learn the language of Italian.

For another example, Lepetit and Cichochi (2002) used a questionnaire to analyze the needs of medical students from Clemson University in the United States to learn Spanish from the perspective of those medical students. They have found that they have shown a strong need to learn Spanish writing skills in addition to how to apply Spanish dictionary use techniques, etc.

### 2.2.2 Needs Analysis in China

After advanced theories and techniques of needs analysis abroad was introduced into China in the early 1990s, many Chinese experts and scholars gradually improved their understanding of needs analysis and introduced them into various research fields (Hu, 2003; Li, 2004). Most Chinese research on needs analysis is empirical; they are classified into social, cultural, and educational needs analysis. Nevertheless, there are still few results of theoretical research on needs analysis. This is because most related research tends to be superficial and mainly focuses on the mere introduction of surface research.

In China, the role and characteristics of needs analysis model research and needs analysis are mainly reflected in society’s development, culture inheritance, and education innovation. The application of requirements analysis in the development of society is primarily reflected in the that contemporary sociologists study the social needs of different social people by various social phenomena (Ma & Jin, 2008) to propose corresponding social needs frameworks and form theoretical results.

Regarding cultural inheritance, needs analysis mainly analyzes people’s needs for an ever-developing culture. Specifically, in the new century, what kind of culture do people need to enrich and improve to adapt to the trend of social development?

In education innovation, needs analysis research is mainly realized to guide education in today’s China, especially in language education (Hu, 2003; Li, 2004). This is because the level
of language application ability of a country directly reflects whether the country is better based on the world stage. The research on needs analysis in education innovation is mainly discussed regarding such aspects as education syllabus planning, curriculum design, and education textbook compilation.

For instance, Wang (2000) investigates the English learning needs of college students from the student's perspective and applies the needs analysis results to guide the formulation of the English education syllabus, the determination of English teaching content, and even English instruction evaluation.

2.2.3. Needs of Use of Medical English Writing Corpus All over the World

The needs for medical English corpora inevitably reflect the demand of medical English learners in the medical English language learning process. As mentioned, medical English corpora also reflect another perspective of how medical English learners learn and apply a language efficiently (Shu, 2004).

In the whole world, academic language learning based on needs analysis, including language learning for specific purposes, etc., has become increasingly important. In China, in the research of academic English learning based on needs analysis, the development of research on medical English has become solid and rich due to the new theoretical frameworks and systematic foundations.

Therefore, academic English learning experts and scholars from China are more focused on the specific impact of needs analysis research on academic English teaching and empirical investigations of it (Wang & Guo, 2016). Medical English learning based on academic English learning theoretical knowledge fully reflects the needs of most medical English writing corpus users. The requirements are necessary, vital, and even urgent.

To conclude, the need to use medical English writing corpus fully reflects the application value of needs analysis theory. At the same time, it has also explained from another perspective that in China, thousands of medical English learners need medical English corpora of their own.

In addition to such a need to have a medical English writing corpus of one’s own, how to use them and how to learn and apply the use of medical English writing corpus strategies correctly, efficiently, and flexibly are also crucial for the majority of medical English learners (Wang & Guo, 2016). Correspondingly, this is also the interest of the researcher of the current study as well as the ultimate goal of it.

3. METHODOLOGY

As to the research methodology, since the current research focuses on a needs-based analysis of the use of medical English writing corpus among contemporary Chinese college medical students, the researcher wants to introduce several aspects of information here.
3.1. Research Purposes

The current research intends to expose and analyze the general medical English writing corpus use among contemporary Chinese college medical students. Specifically, as mentioned at the beginning of the research, it aims to report the need to use English writing corpus among contemporary Chinese college medical students. At the same time, it makes efforts to uncover how to meet the needs of current medical students in Chinese universities and colleges.

3.2. Research Design

The current research design is carried out mainly based on the employment of questionnaires. Therefore, about the research design, structured questionnaires as the primary research tools are thus developed to collect data from the structured questionnaires collected from the research participants.

Within the current research design framework, what has to be clarified is that, as a quantitative research tool, structured questionnaires help to facilitate the research outcome. Those structured questionnaires can also be regarded as a research method. Therefore, the method of questionnaires is also a research method widely applied in many social surveys nowadays (Creswell & Creswell, 2018). The so-called questionnaires refer to the materials used for a variety of collections of data as well as statistics. Questionnaires in research will generally express questions in the form of questioning.

In addition, since the current research is quantitative, in the structured questionnaires of this research, the quantitative research design is mainly to understand the need for medical English writing corpus among contemporary Chinese college medical students. At the same time, such a research design is also meant to know how the requirements for using medical English writing corpus can be or should be met successfully.

3.3. Research Questions

Based on the research purposes, the current research tries to supply further interpretation to uncover those problems mentioned above in terms of medical English writing corpus use among contemporary Chinese college medical students by means of a needs-based analysis.

Therefore, the research questions of the current research are as follows:

Research question No. 1: What is the general situation of using the medical English writing corpus of contemporary Chinese college medical students?

Research question No. 2: What is the actual level of need for medical English writing corpus use among contemporary Chinese college medical students?

3.4. Research Participants

The total number of research participants is one hundred. The research participants are determined using the following two aspects of consideration. Preliminarily, the current research participants are selected from a group of Chinese college medical students from different medical majors with varying levels of medical English learning abilities from a medical university.
in China. And then, the selected Chinese college medical students come from the same medical university. Still, they have different corpus use experiences in medical English language learning.

To emphasize, while determining the group of the current research participants, the researcher tries to make sure that their current majors are different and that the language learning environments they were exposed to are also different from each other before they entered the university. The way to determine and select these college medical students based on such criteria is more conducive to the research regarding the reliability and validity of this research topic.

3.5. Research Site

The researcher has chosen a medical university from Guangxi Province, China, as the research site. As mentioned above, although all the research participants come from different places and they have occupied different corpus use experiences in terms of medical English language learning, in the process of conducting the research, to collect relevant data more directly and objectively, the research participants were requested to take part in the same research site from the beginning to the end. This also aims to provide a more convenient and objective environment for data research and analysis later in the study.

4. FINDINGS & DISCUSSIONS

In the current research findings, the researcher will thus directly answer the research questions based on a detailed discussion of the data collected from the research questionnaires.

4.1. What is the general situation of using the medical English writing corpus of contemporary Chinese college medical students?

With the help of the questionnaires in the current research, the researcher has successfully obtained robust research data to fully demonstrate the general use of medical English writing corpus among contemporary Chinese college medical students. The following are the most original and authentic research results after putting all the relevant data of the questionnaires in the current research into the quantitative statistical software of SPSS 23.0.

<table>
<thead>
<tr>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
<th>RATIO</th>
<th>ACCU. RATIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>VALID</td>
<td>STRONGLY NOT IMPORTANT</td>
<td>5</td>
<td>5.0</td>
</tr>
<tr>
<td>NOT IMPORTANT</td>
<td>10</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td>NO TO MATTER</td>
<td>25</td>
<td>25.0</td>
<td>25.0</td>
</tr>
<tr>
<td>IMPORTANT</td>
<td>30</td>
<td>30.0</td>
<td>30.0</td>
</tr>
<tr>
<td>STRONGLY IMPORTANT</td>
<td>30</td>
<td>30.0</td>
<td>30.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Based on the data in Table 4.1, it is clear that 60% of the research participants recognize the importance of medical English corpora in their own medical English learning. Among them, 30% of the research participants think it is essential, while 30% think it is crucial. It is also shown that only 10% and 5% think it is not or enormously not important.

The general situation of contemporary Chinese college medical students’ understanding of the high level of the importance of medical English corpora is confirmed by Chen (2013) as well as Wang and Guo (2016) in their research on the use of medical English writing corpus and EFL learning among Chinese college medical learners.

**Table 2.** The General Situation of the Number of Medical English Corpora Owned by Contemporary Chinese College Medical students

<table>
<thead>
<tr>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
<th>VALID RATIO</th>
<th>ACCU. RATIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>VALID NONE OWNED</td>
<td>60</td>
<td>60.0</td>
<td>60.0</td>
</tr>
<tr>
<td>ONE OWNED</td>
<td>30</td>
<td>30.0</td>
<td>30.0</td>
</tr>
<tr>
<td>TWO OR MORE OWNED</td>
<td>10</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

According to Table 4.2, it is evident that although 60% (based on Table 4.1) of the research participants believe that medical English corpora are significant, the ownership of medical English corpora is not satisfactory, with a surprising 60% of the research participants who even do not own at least one medical English writing corpus. It is also shown that only 10% of the research participants have more than two medical English corpora, while 30% of the research participants just own one medical English writing corpus.

This general situation of the number of medical English corpora owned by contemporary Chinese college medical students can be recognized by Chen (2013), who has ever found that the ownership of medical English corpora is not satisfactory enough to meet the needs of Chinese college medical learners.

**Table 3.** The General Situation of Frequency of Use of Medical English Writing Corpus of Contemporary Chinese College Medical Students

<table>
<thead>
<tr>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
<th>VALID RATIO</th>
<th>ACCU. RATIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>VALID NEVER</td>
<td>50</td>
<td>50.0</td>
<td>50.0</td>
</tr>
<tr>
<td>Seldom</td>
<td>30</td>
<td>30.0</td>
<td>30.0</td>
</tr>
<tr>
<td>Sometimes</td>
<td>10</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Always</td>
<td>10</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

According to Table 4.3, it is clearly shown that the results are not optimistic for the frequency of use of medical English writing corpus among the research participants. Although 40% (based on Table 4.2) of the research participants have at least one or more medical English corpora, in sharp contrast, 80% of them do not use medical English corpora. Nearly 50% of the medical English corpora are left unused by the research participants.
Table 4. The General Situation of Sources of Medical English Corpora Owned by Contemporary Chinese College Medical Students

<table>
<thead>
<tr>
<th>Sources</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Valid Ratio</th>
<th>Accu. Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>FROM BOOKSTORES</td>
<td>20</td>
<td>20.0</td>
<td>20.0</td>
<td>20.0</td>
</tr>
<tr>
<td>FROM LIBRARIES</td>
<td>20</td>
<td>20.0</td>
<td>20.0</td>
<td>40.0</td>
</tr>
<tr>
<td>FROM ELECTRONIC MEANS</td>
<td>25</td>
<td>25.0</td>
<td>25.0</td>
<td>65.0</td>
</tr>
<tr>
<td>FROM THE INTERNET</td>
<td>35</td>
<td>35.0</td>
<td>35.0</td>
<td>100.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

The data from Table 4.4 shows that when the research participants were asked about the sources of the English medical corpora they use, only 20% bought it from a bookstore. In comparison, 20% of them borrowed it from a library, and nearly 25% of the research participants had said what they used was an electronic version of the medical English writing corpus. Another 35% of the research participants said that the medical English writing corpus they used came from the Internet using the online search function, etc.

Huang’s (2013) early survey on the particular purpose of English teaching on needs analysis, together with Wang and Guo’s (2016) research on the use of medical English writing corpus, has convinced what is shown from the above data.

4.2. What is the actual level of need for the use of medical English writing corpus among contemporary Chinese college medical students?

The actual level of need for the use of medical English writing corpus among contemporary Chinese college medical students is mainly reflected in the following two aspects, which include the lack of how to deal with the relevant new medical words in the medical field as well as when to use medical English corpora in the actual medical English language learning practice.

Table 5. How Contemporary Chinese College Medical Students Deal with New Medical Words in the Actual Needs of Use of Medical English Writing Corpus

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Valid Ratio</th>
<th>Accu. Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>SKIP NEW WORDS</td>
<td>25</td>
<td>25.0</td>
<td>25.0</td>
<td>25.0</td>
</tr>
<tr>
<td>GUESS NEW WORDS</td>
<td>30</td>
<td>30.0</td>
<td>30.0</td>
<td>55.0</td>
</tr>
<tr>
<td>ADOPT RELATIVE</td>
<td>35</td>
<td>35.0</td>
<td>35.0</td>
<td>90.0</td>
</tr>
<tr>
<td>STRATEGIES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HAVE NO IDEAS</td>
<td>10</td>
<td>10.0</td>
<td>10.0</td>
<td>100.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Based on Table 4.5, it is fully shown that most of the research participants (90%) can deal with new medical words effectively. 25% of the research participants skip the new medical words when encountering them and wait until they finish the whole article in their reading. At the same time, 30% of the research participants chose to guess the meaning of the new medical words based on the context and then check their sense of them after reading the entire text.
The questionnaires also show that 35% of the research participants adopt the strategy of seeking help from a medical English writing corpus while reading the article since they want to understand the medical reading materials fully. This has implied and reflected that the actual need for the use of medical English writing corpus among contemporary Chinese college medical students is pretty high in general.

Table 6. When Contemporary Chinese College medical students Use Medical English Corpora in the Actual Medical English Language Learning Practice

<table>
<thead>
<tr>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
<th>VALID RATIO</th>
<th>ACCU. RATIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>TO KNOW THE PRAGMATIC MEANING</td>
<td>30</td>
<td>30.0</td>
<td>30.0</td>
</tr>
<tr>
<td>TO KNOW THE CULTURAL MEANING</td>
<td>30</td>
<td>30.0</td>
<td>30.0</td>
</tr>
<tr>
<td>TO KNOW THE BASIC MEANING</td>
<td>25</td>
<td>25.0</td>
<td>25.0</td>
</tr>
<tr>
<td>IT DEPENDS</td>
<td>15</td>
<td>15.0</td>
<td>15.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.6 shows that 85% of the research participants would instead turn to medical English corpora for help when encountering unfamiliar or new medical words. Specifically, 30% of the research participants decide to seek help from English medical corpora when they want to know practical or cultural information about medical English words. At the same time, 25% of the research participants choose to look up a medical English writing corpus just when they want to know the basic meaning of the new medical words.

What has to be noted is that the results of Table 4.6 have significant implications for the development of medical English lexicography and terminology. To emphasize, medical English writing corpus editors should strengthen the work of searching and collecting enough kinds of medical professional terms.

Given this, just as Zhu and Li (2013) suggest, the compilation of medical English corpora should therefore focus on the query function of academic medical terminology in English (Yong, 2013) to fully reflect and exclaim the professional characteristics and lexicographical excellence of contemporary medical English corpora in the new century.

5. CONCLUSION
5.1 From Use of Medical English Writing Corpus to Language Learning
Any kind of use of language corpus belongs to the language learning of a specific language. Therefore, the use of medical English corpora has reflected one of the ways for English language learners to learn the language of English.

The explosive rise and historical development of corpus use have brought significant changes to a specific field of language education among many Chinese universities and
colleges (Wang, Shang & Li, 2009). Since then, language educators and learners can deeply feel those changes and their importance in their language teaching and learning (Liang, Li & Xu, 2010).

Thus, a complete understanding of the relationship between the use of medical English writing corpus and language learning goes to how, in the field of language education, the use of medical English writing corpus among Chinese college medical students promotes and improves the teaching efficiency of language teachers and the language learning manners of language learners.

From a theoretical perspective, the general use of medical English writing corpus among college medical students in China has helped most Chinese universities and colleges establish a more comprehensive and scientific instructional system, especially for language teaching and language learning in multimedia classrooms (Li, 2004). Such a situation has further provided an adequate theoretical framework for establishing the instructional system for most Chinese universities and colleges.

Regarding teaching methodology among medical English teachers, medical students’ use of medical English writing corpus has been excellent in using multi-modal resources for the Chinese college teachers and cultivating positive values for the Chinese college medical students. To a large extent, it also focuses on conceptual understanding and knowledge mastery (Zhu & Li, 2013), attaching great importance to critical thinking and analytical application skills among Chinese college medical students while they look up medical words and phrases in the medical English writing corpus.

Besides, under the background of foreign language teaching reforms in Chinese universities and colleges, the country has a high demand for new foreign language talents with writing and translation skills (Shu, 2004).

In that case, the use of medical English writing corpus among Chinese college medical students will enlighten the vast majority of Chinese language educators in terms of changing teaching methods in foreign language writing and translation classes, which will guide them to help medical students to use different kinds of medical English corpora effectively. Thus, this is a crucial issue and a promising good continuously explored by most Chinese language educators and researchers in the future.

Canagarajah (2011) has always said that when the socio-cultural theory becomes a new perspective to improve language learners’ thinking and literacy skills, the new literacy theory requires that any writing context should be closely connected with the world (Hu, 2007). At the same time, Chinese college medical students are given the opportunity and the power to make full use of different kinds of medical English corpora to liberate their language ability and their thinking creativity in their medical English learning practice ultimately.
5.2 Limitations

Although the current research has provided a detailed analytical interpretation of the findings regarding the use of medical English writing corpus among Chinese college medical students, it has shortcomings. Specifically, the number of research participants is not large enough, and the use of medical English writing corpus accesses among the research participants is small; most importantly, some of the results and findings depend on questionnaires. In future research on such topics or issues, what has been mentioned and listed above should be seriously taken into consideration and comprehensively treated to improve the reliability and validity of the research.

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7. REFERENCES


