Medical English Dictionary Utilization among Contemporary Chinese Tertiary Medical Students: A Needs-Based Analysis

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ABSTRACT

This current research exposes and analyzes the general situation of medical English dictionary utilization among contemporary Chinese tertiary medical students. Eighty medical students from a Chinese medical university took part in the research and they were asked to answer purposefully designed questionnaires. A follow-up interview was also conducted to collect further data regarding medical English dictionary utilization. The results of the current research have shown that there is a strong need of medical English dictionary utilization among contemporary Chinese tertiary medical students as well as a severe lack of guidance for medical English utilization from medical teachers in Chinese medical universities. The current research further suggests that medical teachers should also guide medical students to meet the needs of selecting proper medical English dictionaries sensibly to facilitate them to utilize their own medical English dictionaries as possible as they can in their medical English learning practice.

INTRODUCTION

Dictionaries, for language learners, have always been an indispensable tool when they learn languages (Chen & Li, 2009; Cowie, 1999; Liang & Xu, 2017). However, for Chinese tertiary medical students, when they are studying medical English, even though the role of a medical English dictionary becomes much more important, there is a severe lack of proper medical English dictionaries accessible for utilization (Yang, 2017). Whether there is a medical English dictionary of their own, or a medical English dictionary suitable for them to utilize, it has been playing a significant role for Chinese tertiary medical students in their medical English learning practice.

All over the world, researches on the utilization of medical English dictionaries, which began in the 1870s, have provided countless reference experiences and guidance for many medical English dictionary utilizers (Hartmann, 2005). Nevertheless, in China, who has a large population base, or in other words, who has a large number of medical students, there are very few researches related to the utilization of medical English dictionaries (Chen & Li, 2009).

Especially in the new era of the 21st century in China, many problems and difficulties regarding the utilization of medical English dictionaries have also continued to appear (Hu & Zhang, 2013; Wang, Shang & Li, 2009). In other words, there are very few relevant researches that have explored issues including what the needs of medical English dictionary utilization are among contemporary Chinese tertiary medical students as well as how to meet the needs for contemporary medical students in Chinese universities, ultimately helping them effectively utilize their own medical English dictionaries and promoting their medical English learning practice.

Analyzing the needs of a group of people or what is embedded in an issue can definitely help us as researchers see the manifestation of the corresponding problems more clearly. In general, the needs of the Chinese tertiary medical students have triggered the problems to be mainly reflected in the following aspects.

First of all, not every Chinese tertiary medical student has at least one medical English dictionary of their own (Tang, Tang & Chi, 2010). And then, not every one of them does have relevant medical professionals to guide them to correctly choose one medical English dictionary that suits them properly (Chen & Li, 2009). Finally, and most importantly, not every one of them does embrace relevant organizations or institutions to provide necessary training programs or training courses to guide them on how to correctly as well as flexibly utilize their medical English dictionaries once or if they already have.

LITERATURE REVIEW
Medical English

The so-called "Medical English", to put it simply, it 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 is 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 medical English writing, etc.

Medical English Dictionary

Obviously, a medical English dictionary is a tool for medical

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English learners to provide medical English knowledge or provide medical English knowledge translation. We all know that a 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 important English medical dictionaries are for learners of medical English knowledge. At the same time, medical English dictionaries are also important and necessary for the majority of medical professional learners. In today's world, in order to meet the needs of social development, the number of dictionaries has increased rapidly and dictionaries for different topics, different industries and different purposes have been developed. The "Medical English Dictionary" is no exception. Medical English dictionaries are also divided into many types with different topics according to different medical majors or medical applications. To name but a few, the following table 1 has clearly given us a general picture of medical English dictionaries in terms of different types and different publications.

Table 1: Examples of Some Types of Medical English Dictionaries

Editor(s)	Name of the Dictionary	Publication	Year
Qun, Z.	The Chinese-English Medical Dictionary.	Beijing: People's Medical Publishing House (PMPH).	2015
Wei, C. & Ding, L.	The English-Chinese Medical Dictionary.	Shanghai: Shanghai Science and Technology Press.	2015
Fang, T., Ji, B., & Wu, Q.	New Chinese-English Dictionary of Traditional Chinese Medicine.	Beijing: China Medical Science and Technology Press.	2013
Fang, M.	Dictionary of Chinese Medicine.	Shanghai: Shanghai Education Press.	2011
Wei, C.	An English-Chinese Medical Dictionary. (3rd edition).	Shanghai: Shanghai Science and Technology Press.	2009
Xiao, W. & Yi, Z.	English-Chinese Medical Dictionary.	Beijing: Foreign Language Teaching and Research Press.	2008
Li, J.	Dictionary of Traditional Chinese Medicine.	Beijing: People's Medical Publication.	2005
Yong, B.	An English-Chinese Dictionary of the World's Medicine.	Beijing: World Book Inc.	2004

Medical English Dictionary Utilization among Chinese Tertiary Medical Students

The utilization of medical English dictionaries is an indispensable part of the process of Chinese tertiary medical students' learning of medical English knowledge. Similar to the situation around the world, most Chinese tertiary medical students also have much to consider in terms of medical English dictionary utilization. In general, although the majority of Chinese tertiary medical students understand the importance of medical English dictionaries, they still do not pay attention to the how to utilize a proper medical English dictionary accordingly.

Wang, Shang and Li (2009) have ever suggested such a fact that the utilization of medical English dictionaries among Chinese tertiary medical students lacks a sort of guidance of relevant professional medical teachers. It has ultimately led to the eagerness of Chinese tertiary medical students to get guidance in this regard.

This is because they know deeply that as medical learners, if they can learn some dictionary strategies to strengthen the learning of medical English knowledge, it will be able to better help them utilize the resources of medical English dictionaries actively.

It will finally transform the utilization of medical English dictionaries among Chinese tertiary medical students from a passive status to a positive one (Zheng, 2016; Zhu & Li, 2013).

Needs Analysis

Dingfang Shu (2004) once defined needs analysis as such: "…it is a technique and method for doing researches on needs through introspection, interviews, observations, and questionnaires."(Shu, 2004, p.82)

Generally speaking, needs analysis belongs to the category of empirical investigations and studies. 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, so as to finally find out the problems in the investigations and studies, guiding the needs-based researches as well as improving the needs-based analyses.

Needs Analysis around the World

Based on the concept of needs analysis, the theoretical framework of target needs analysis and the technical means of needs analysis, the research 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).

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 period of research.

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 then the researches on needs analysis were continuously improved through different kinds of results from different surveys. The clarification of the concept of needs analysis marks the official opening of the curtain of needs analysis researches.

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 researches in different disciplines. In particular, during this period, researches on English learning needs analysis were the main focus (Chan, 2001; Huong, 2018; Wang, 2000). The research content was complicated and the research results were relatively rich, which had made it called the development period.

The stable period of needs analysis refers to the period of continuous and rapid development from 2000 to the present. During this period, with the continuous maturity of needs analysis techniques and methods, many foreign scholars conducted numerous empirical researches based on needs analysis (Chen, 2009; Ma & Jin, 2008). For example, in the field of 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) have ever 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, and have found that they have shown a strong need to learn Spanish writing skills in addition to how to apply Spanish dictionary utilization techniques, etc.

Needs Analysis in China

In the early 1990s, after advanced theories and techniques of needs analysis abroad were introduced into China, many Chinese experts and scholars gradually improved their understanding of needs analysis and introduced them into various research fields (Hu, 2003; Li, 2004; Wang, 2000). Most of the Chinese researches on needs analysis are empirical researches, they are classified into social, cultural and educational needs analysis researches.

Nevertheless, there are still few results of theoretical researches on needs analysis. This is because most of the related researches tend to be superficial, and mostly focus on mere introduction of surface researches.

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

In terms of cultural inheritance, needs analysis mainly analyzes people's needs for an ever-developing culture (Onder-Ozdemir & Pun, 2020). Specifically, in the new century, what kind of culture people need to enrich them and improve them, so as to adapt to the trend of social development. This, as a matter of fact, is because in the field of education innovation, researches of needs analysis are mostly related to guiding education in today's China, especially in the field of language education (Hu, 2003; Li, 2004).

In the field of education innovation, researches of needs analysis are mostly related to guiding education in today's China, especially in the field of 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 researches on needs analysis in the field of education innovation are mainly discussed regarding such aspects as education syllabus planning, education curriculum designing and education textbook compilation. For example, Wang (2000) investigates the English learning needs of college students from the perspective of the students, 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.

Language Learning

Language learning is a big concept. As an extremely important aspect of human learning, language learning is of course also one of the important topics of linguistics, especially psycholinguistics. The content of language learning is also very extensive. According to Tusi (2002), the order of the target language learned divides language learning into first language learning, second language learning and so on. Meanwhile, based on whether the target language is the mother tongue or not, language learning can be divided into mother tongue learning and foreign language learning.

In the current research, utilization of medical English dictionary is actually a sort of application of language skill of the English language learning. This is meant that how well contemporary Chinese tertiary medical students utilize their medical English dictionary inevitably reflects

how well they have learned in terms of their language learning. Therefore, in this section, before we embark on a detailed analysis of medical English dictionary utilization among contemporary Chinese tertiary medical students, a brief understanding of language learning all over the world, together with the general situation of needs of language learning around the world will be introduced and discussed within this section.

Language Learning All Over the World

Times are changing while people are also adjusting to the historical development of the society. Therefore, in the field of language education, people are also having different attitudes towards language learning in terms of their philosophical believes.

There were new subtle changes in the development of language learning in the 1980s and 1990s around the world. Simply put, people's philosophical viewpoints of language learning thus change as the power structure between schools and students changes, reflecting the contests of interests between various power groups (Kirkpatrick, 2011). This is due to the fact that, schools play a central role in defining and replicating language learning skills (Ge & Luo, 2010). This is because schools often give legal status to certain knowledge, words, deeds, and ways of doing things, and regard the results of language learning skills as the requirements for obtaining an educational diploma.

People's philosophical believes of language learning has also led to the fact that language learners' awareness and demand for language learning tend to become greater and greater (Freire, 2000). This understanding and demand has also been widely reflected in the process of language education (Tusi, 2002), making the majority of students change from a status in which they do not pay attention to the development of language learning to another status in which they pay much more attention to language learning development.

Entering the 21st century, the historical development of language learning has brought new connotations and extensions to people's new philosophical understanding of language learning. Globalization's historical changes and development have ushered a new indication of language learning (Ge & Luo, 2010). Different from the previous believes, the new development of language learning requires schools to change the existing power model and listen to students' voices when defining language learning and formulating language learning programs.

Above all, this requires in-depth and meticulous researches on the school's language learning practice, incorporating various forms of language learning and different voices into the discussion and studies of language learning skills based on people's updated philosophies of language learning as well as the language itself.

Needs of Language Learning All Over the World

Around the whole modern world, in the development process of language learning needs analysis research, based on the concept of needs analysis and its technical means, the research development process of language learning needs analysis changes with the development of needs analysis research in different periods, thus having a series of new breakthroughs.

The new century has witnessed that language learning needs analysis needs to have outstanding application value in many fields (Bu, 2013; Chen, 2013; Iwai, Kondo, Lim, & Ray, 1999). Therefore, language learning needs analysis has also been closely related to the economic and cultural exchanges of every country in the world. The research of language learning needs analysis also has greatly impacts foreign language education. For example, in the field of English language education, the English language learning needs analysis plays a fundamental role in the research of the English language education.

Bu (2013) has ever added that the world-wide research on language learning needs analysis has a long history, and it has also formed a relatively complete theoretical framework and theoretical system for language learning needs analysis. Discussions among linguistic experts and scholars worldwide are also active, comprehensive, and even more systematic in the research and discussion of language learning needs analysis (Chen, 2013; Iwai, Kondo, Lim, & Ray, 1999). Researches based on the analysis of language learning needs are also empirical investigations, which have also provided a strong theoretical basis for language teaching and a practical basis for language educators worldwide.

MATERIALS AND METHODS
Research Purposes
The current research intends to expose and analyze the general situation of medical English dictionary utilization among contemporary Chinese tertiary medical students. Based on what has been introduced and analyzed in literature review, this research makes efforts to answer such questions as what the general situation as well we what the actual needs of medical English dictionary utilization are among contemporary Chinese tertiary medical students.

Research Questions
Based on the research purposes, the research questions of the current research are as follows:

Research question No. 1
What is the general situation of medical English dictionary utilization of contemporary Chinese tertiary medical students?

Research question No. 2
What is the actual level of needs of medical English dictionary utilization among contemporary Chinese tertiary medical students?

Research Participants
The current research has selected a group of Chinese

tertiary medical students from different medical majors with different levels of medical English learning abilities as well as with different anthropological background of language learning from a medical university in China as the research participants. The total number of the research participants is eighty.

Among the selected Chinese tertiary medical students, specifically, they come from the same medical university, but they have different dictionary utilization experiences in terms of language learning. Their current majors are different, and the language learning environments they were exposed to are also different from each other before they enter the university. Selecting these tertiary medical students based on such criteria is more conducive to the research in terms of the reliability and validity of this research topic.

Research Site
The researchers have chosen a medical university from Guangxi Province, China as the research site. The research participants were requested to take part in the same research site from the beginning to the end. This is also aimed at providing a more convenient and objective environment for data research as well as data analysis in the later stage of the research.

Research Instruments/Tools
The current research has mainly two kinds of research instruments or tools, including questionnaires and interviews.

Questionnaires
As a quantitative research instrument, questionnaires help to facilitate the outcome of the research. 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). In the questionnaires of this research,

the quantitative research is mainly to understand the needs of medical English dictionary utilization among contemporary Chinese tertiary medical students. The research purposefully uses EXCEL 2010, ICTCLAS. 2014 and the statistical software of SPSS 23.0 as well as other related tools to further analyze and explain the results of the questionnaires.

Interviews
Interviews are also employed to help to carry out the current research. As a qualitative research method as well as research instrument, interviews are also a common method for consulting and obtaining information (Yin, 2016).

In the interviews of this research, same here, it is mainly aimed at understanding the needs of medical English dictionary utilization among contemporary Chinese tertiary medical students through what they have said during the interview processes. The data obtained from the interviews will be coded and decode through the qualitative statistical software of ATLAS.ti 9.0 as well as some categorization tools to further analyze and interpret the data drawn from the interviews.

RESULTS AND DISCUSSION
In terms of the current research results, the researchers will directly answer the three research questions based on a detailed discussion of the data collected and coded from the research instruments or tools that include questionnaires and interviews.

What is the General Situation of Medical English Dictionary Utilization of Contemporary Chinese Tertiary Medical Students?
With the help of the questionnaires in the current research, the following is the most original and true research results after putting all the relevant data of the questionnaires in the current research into the quantitative statistical

Table 2: The General Situation of Contemporary Chinese Tertiary Medical Students' Understanding of the Importance of Medical English Dictionaries

Valid		Frequency	Percentage	Ratio	Accu. Ratio
	Strongly Not Important	2	2.5	2.5	2.5
	Not Important	8	10.0	10.0	12.5
	No to Matter	5	6.3	6.3	18.8
	Important	44	55.0	55.0	73.8
	Strongly Important	21	26.3	26.3	100.0
	Total	80	100.0	100.0	

software of SPSS 23.0.

Based on the data in Table 2, it is clear that more than 81.3% of the research participants recognize the importance of medical English dictionaries in their own medical English learning. Among them, 26.3% of the research participants think it is strongly important, while 55% think it is important. It is also shown that only 10% and 2.5% think it is not important or strongly not

important at all.

The general situation of contemporary Chinese tertiary medical students' understanding of a high level of the importance of medical English dictionaries is actually confirmed by Chen (2013) as well as Wang and Guo (2016) in their researches on medical English dictionary utilization and EFL learning among Chinese tertiary learners.

Table 3: The General Situation of the Number of Medical English Dictionaries Owned by Contemporary Chinese Tertiary Medical Students

Valid		Frequency	Percentage	Valid Ratio	Accu. Ratio
	None Owned	46	57.5	57.5	57.5
	One Owned	25	31.3	31.3	88.8
	Two or More Owned	9	11.3	11.3	100.0
	Total	80	100.0	100.0	
	Strongly Important	21	26.3	26.3	100.0
	Total	80	100.0	100.0	

According to Table 3, it is obvious that although more than 81.3% (based on Table 2) of the research participants believe that medical English dictionaries are very important, the ownership of medical English dictionaries is not satisfactory, with a surprising 57.5% of the research participants who even do not own at least one medical English dictionary.

It is also shown that only 11.3% of the research participants have more than two medical English dictionaries while 31.3% of the research participants just own one medical English dictionary.

This general situation of the number of medical English dictionaries owned by contemporary Chinese tertiary medical students can be obviously recognized by Chan (2012) as well as Chen and Li (2009) who have ever found that the ownership of medical English dictionaries is not satisfactory enough to meet the needs of Chinese tertiary medical learners.

Table 4: The General Situation of Frequency of Medical English Dictionary Utilization OF Contemporary Chinese Tertiary Medical Students

Valid		Frequency	Percentage	Valid Ratio	Accu. Ratio
	Never	41	51.2	51.2	51.2
	Seldom	24	30.0	30.0	81.3
	Sometimes	9	11.3	11.3	92.5
	Always	6	7.5	7.5	100.0
	Total	80	100.0	100.0	
	Total	80	100.0	100.0	

According to Table 4, it is clearly shown that the results are not optimistic for the frequency of medical English dictionary utilization among the research participants. Although 88.8% (based on Table 3) of the research participants have at least one or more medical English dictionaries, in sharp contrast, 81.2% of them basically do not utilize medical English dictionaries. Among them, nearly 51.2% of the medical English dictionaries are left unutilized by the research participants.

In this case, the general situation of frequency of medical English dictionary utilization of contemporary tertiary medical students can also be clarified by Chan's (2012) early research on the utilization of monolingual dictionary among Cantonese ESL learners.

What is the Actual level of Needs of Medical English Dictionary Utilization among Contemporary Chinese Tertiary Medical Students?
Quantitative Data Analysis
The results of the questionnaires of the current research have once again provided powerful quantitative research data to fully demonstrate the actual level of needs of medical English dictionary utilization among contemporary Chinese tertiary medical students. The following are the most primitive and true quantitative results obtained from two statistical softwares including ICTCLAS. 2014 and SPSS 23.0.
Based on Table 5, it is fully shown that most of the research participants (91.3%) are able to deal with new

Table 5: How Contemporary Chinese Tertiary Medical Students Deal with New Medical Words in the Actual Needs of Medical English Dictionary Utilization

Valid		Frequency	Percentage	Valid Ratio	Accu.Ratio
	Skip New Words	22	27.5	27.5	27.5
	Guess New Words	24	30.0	30.0	57.5
	Adopt Relative Strategies	27	33.8	33.8	91.3
	Have No Dideas	7	8.8	8.8	100.0
	Total	80	100.0	100.0	

medical vocabulary effectively. 27.5% of the research participants choose to skip the new medical vocabulary when they encounter them and wait until they finish the whole article in their reading. At the same time, 30% of the research participants choose to guess the meaning of the new medical words based on the context, and then check the meaning of them after finishing reading the entire text. The results of the questionnaires also show that 33.8% of the research participants adopt the strategy

of seeking help from a medical English dictionary while reading the article since they want to have a full understanding of the medical reading materials. This has actually implied and reflected that the actual level of needs of medical English dictionary utilization among contemporary Chinese tertiary medical students is pretty high, which has been identified with Hu and Zhang's (2013) research on the effect of definition model in Chinese-English dictionary utilization.

Table 6: When Contemporary Chinese Tertiary Medical Students Utilize Medical Dictionaries in the Actual Needs of Medical English Dictionary Utilization

Valid		Frequency	Percentage	Valid Ratio	Accu. Ratio
	To Know the Pragmatic Meaning	23	28.7	28.7	28.7
	To Know the Cultural Meaning	23	28.7	28.7	57.5
	To Know the Basic Meaning	20	25.0	25.0	82.5
	It Depends	14	17.5	17.5	100.0
	Total	80	100.0	100.0	

Table 6 has shown that, 82.5% of the research participants would rather choose to turn to medical English dictionaries for help when they encounter unfamiliar or new medical words. Specifically, 28.7% of the research participants choose to seek help from medical English dictionaries when they want to know the pragmatic or cultural information of the medical English vocabulary. While 25% of the research participants choose to look up a medical English dictionary just when they want to know the basic meaning of the new medical vocabulary. Based on this point, the results of Table 5 have great implications for the development of medical English

lexicography and terminology. To emphasize, medical English dictionary editors should strengthen the work of searching and collecting enough kinds of medical professional terms. In this way, just as Lew and de Schryver (2014) suggest, the compilation of medical English dictionaries should therefore focus on the query function of medical academic terminology in English (Welker, 2010; Xie, 2014), so as to fully reflect and exclaim the professional characteristics and lexicographical excellence of contemporary medical English dictionaries in the new century.

Generally, the types of medical English dictionaries include

Table 7: What Types of Medical English Dictionaries Contemporary Chinese Tertiary Medical Students Choose to Utilize in the Actual Needs of Medical English Dictionary Utilization

Valid		Frequency	Percentage	Valid Ratio	Accu. Ratio
	English-Chinese	37	46.3	46.3	46.3
	English-English/Chinese	19	23.8	23.8	70.0
	English-English	14	17.5	17.5	87.5
	Others	10	12.5	12.5	100.0
	Total	80	100.0	100.0	

bilingual medical English dictionaries (English-Chinese), bilingual interpretation of medical English dictionaries (English-English/Chinese), monolingual medical English dictionaries (English-English), as well as other kinds of medical English dictionaries in terms of language classification. According to results of Table 7, it shows that only about one fifth of the research participants have the habit of utilizing the type of monolingual medical English dictionaries (English-English). Only 12.5% of the research participants utilize other types of the English-English medical English dictionaries. Among the others, up to 46.3% of the research participants choose to utilize the type of the English-Chinese medical English dictionary, while with 23.8% of the research participants choose to utilize the type of bilingual medical English

dictionaries (English-Chinese), which include Chinese interpretation in the medical English dictionaries.

The types of English medical dictionaries contemporary Chinese tertiary medical students choose to utilize in the actual needs of medical English dictionary utilization imply and have also confirmed with Lew and de Schryver's (2014) research on dictionary utilization in the digital revolution as well as Chan's (2012) early study on the specific utilization of monolingual dictionary for meaning determination among advanced Cantonese ESL Learners.

Qualitative Data Interpretation
The results of the interviews in the current research have also provided foundational qualitative research data

for the topic of the research. The following is the most primitive and true qualitative results obtained from the qualitative statistical software of ATLAS.ti 9.0 as well as some other categorization tools after putting the relevant data of the interviews of into them.

One of the research participants said in an interview in this way,

"Although I really want to use a monolingual medical English dictionary to improve my medical English learning ability, however, helplessly, I even cannot find a true and meaningful monolingual medical English dictionary."

Another research participant had also said in an interview that,

"…unlike ordinary English dictionaries, I think many medical English dictionaries generally contain professional medical vocabulary, which is relatively uncommon, and their explanation will inevitably involve other professional medical vocabulary. If I use ordinary English to explain those medical vocabularies, this will greatly increase the difficulty of my medical English learning."

In addition, many other research participants in the interviews also expressed their own urgent needs for medical English dictionary utilization respectively. Therefore, based on situations described and the problems exposed from the interviews in the current research, it is obvious that this has uncovered such a fact that, specifically, in the process of medical English dictionary utilization, the majority of contemporary Chinese tertiary medical students' actual level of needs for it is relatively high and is mainly reflected in the following two major aspects.

On the one hand, based on the situations described and results gained from the interviews, most medical English learners had expressed the strongest level of needs for the specific meanings and pronunciations of words and phrases in the medical English dictionary. Then, the level of needs for the sentential explanations of medical English words had followed by closely.

On the other hand, based on problems exposed from the interviews, medical English learners had also expressed the strongest level of needs for the particular word information records in the medical English dictionary. Although many medical English learners had said that they could deal with the medical English word information records actively and flexibly, they had not cultivated the habit of recording word information (Onder-Ozdemir & Pun, 2020). Therefore, it is strongly suggested that, the higher the level of needs for the utilization of medical English dictionaries is, the more emergent and the more significant it is for the problems to be handled.

At the same time, some of the research participants had also said that recording the information of words might be a way of strategy to strengthen their memorizing ability. According to them, only looking up the medical dictionary without recording the word information would affect their general level of medical English dictionary utilization to a certain extent. They even said that how to

record medical English vocabulary information efficiently and time-savingly also requires guidance from medical English teachers.

CONCLUSION
From Medical English Dictionary Utilization to Language Teaching and Learning

Based on the detailed description of the results and discussion, the current research successfully exposes and analyzes the general situation of medical English dictionary utilization among contemporary Chinese tertiary medical students. To a certain extent, the utilization of any kind of dictionary belongs to the language teaching and learning of a certain language. Therefore, the utilization of medical English dictionaries has definitely reflected one of the ways for English language educators to teach English as well as English language learners to learn English as a language. In light of this, the results of the current research have consequently shown that there is a strong need of medical English dictionary utilization among contemporary Chinese tertiary medical students as well as a severe lack of guidance for medical English utilization from medical teachers in Chinese medical universities. Besides, the current research further suggests that medical teachers should also guide medical students to meet the needs of selecting proper medical English dictionaries sensibly to facilitate them to utilize their own medical English dictionaries as possible as they can in their medical English learning practice.

LIMITATIONS

Although the current research has provided detailed analytical interpretation of the findings regarding medical English dictionary utilization among Chinese tertiary medical students, it does have some shortcomings. Specifically, the number of research participants is not large enough, the amount of medical English dictionary utilization accesses among the research participants is small and most importantly, some of the results and findings are basically dependent on questionnaires and interviews. In the future researches on such topics or issues, what has been mentioned and listed above should be seriously taken into consideration and comprehensively treated so as to ultimately improve the reliability as well as the validity of the research.

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