

An Investigation on Medical English Learning Motivation and Strategies Among Clinical Students in One Chinese University

Li,Xiaoyan

Qilu Medical University Zibo, Shandong, P.R. China 255300

Abstract: This study aimed to contribute to the improvement of the clinical students' medical English learning ability in a Chinese university, their medical English learning motivation and strategies, thus, enhancing their learning performance, interest and proficiency in medical English learning, and make medical English teaching in the medical university more efficient and effective. The participants involved in this quantitative research were 400 clinical students from one Chinese university. The results revealed that majority of the respondents are female, with very good English skills, and in their first year. Respondents agreed on all the subscales of medical English learning motivation, perform higher on competition and extrinsic motivation, however lower with regard to intrinsic motivation. The current level of medical English learning motivation among clinical students is moderate, but far from satisfactory. The respondents are more adept at social and metacognitive techniques than the other four dimensions of medical English learning strategies. intermediate in terms of compensatory, cognitive, and memory methods, and weak in terms of affective strategies. There were significant differences in responses concerning medical English learning motivation and strategies when the clinical students were categorized according to sex and English rating yet not significant in the extrinsic and intrinsic motivation when grouped according to year level. In terms of learning motivation and strategies, there is significant difference specifically in terms of Rating in English. There is a highly significant relationship between medical English learning motivation and strategies.

Keywords: Medical English learning motivation; Medical English learning strategies; Clinical students

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1. Introduction

With the increase of international communication, English, as the common language for international communication, plays an increasingly important role. With China's accession to the WTO, there is a vast demand for English talents, among which the compound and applied talents with solid professional knowledge and high English level are particularly popular. In recent years, China's medical profession has developed rapidly, with increasingly frequent exchanges with other countries, and medical and health practitioners are facing higher requirements. The goal of medical English courses in medical colleges and universities is to cultivate compound talents with both professional medical knowledge and proficient communication ability in English in order to meet the needs of social development. However, many doctors who graduated from domestic medical colleges and universities have a certain level of reading English books and literature, but they are very poor in writing medical theses and abstracts in English, and the ability to communicate in English is also widely available. For students in clinical medical college, English learning motivation plays an important role in medical English learning. As students tend to study professional courses, it is easy to neglect the study of medical English. Additionally, according to a survey, more than 95% of clinical students would choose medical English as an elective. Most students have a pure motive for choosing medical English. Many Chinese students in English learning are poor in learning strategy knowledge and lack of awareness of learning strategy. Their learning process belongs to the extensive type, mainly in the state of waiting. It is found that about 45% of the students in the process of English learning are only limited to rote memorization. Furthermore, medical students were found to be more likely to use compensatory strategies.

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metacognitive strategies are the least used by medical students. Many students lack initiative and independence in English learning. All in all, the application of English learning strategies is a very crucial aspect in the process of students' learning. In the process of medical English learning, clinical students accumulate relevant learning strategies in practice and apply them into practice. The use frequency of learning strategies affects clinical students' medical English learning to some extents.

2. Objectives of The Study

The study aimed to contribute to the improvement of the clinical students' medical English learning ability in a Chinese university, their medical English learning motivation and strategies, in order to improve the students' learning performance, their interest and proficiency in medical English learning, and make medical English teaching in the medical university more efficient and effective. To be specific, the proposed study aimed to describe the profile of respondents in terms of their sex, general English rating and their year level to determine the clinical students' medical English learning motivation in extrinsic, competition and intrinsic aspects; analyze the clinical students' medical English learning strategies from metacognitive, cognitive, social, affective, memory and compensation perspectives; test the significant difference of responses in learning motivation and strategies and when grouped according to profile variables; test the relationship between and among medical English learning motivation and strategies, and propose a language learning plan to enhance the clinical students' medical English learning motivation and learning strategies.

3. Review of Literature

(1) Learning motivation

Motivation has received a lot of research attention because of its great influence on foreign language acquisition. This is often mentioned by different language teachers when they talk about the successes and failures of learning a foreign language. In the 1990s, motivation research gradually expanded from the perspective of social psychology to other perspectives such as physiology, sociology, behaviorism and so on. A variety of motivational models have emerged. In the same year, the famous linguist Dornyei proposed a three-level structure of motivation in foreign language learning, namely, language level, learner level and learning context level, this paper discusses the influence of motivation factors on learner motivation from the school level. In addition, Schumann proposed a framework of continuous deep learning from a neurophysiology perspective to explore strategies to motivate learners. These motivation theories have laid a solid theoretical foundation for future research in second language learning and other fields.

Owing to the many different aspects of research regarding motivation, the classifications of it are also diverse, which mainly discussed in the paper are instrumental and integrative motivation, intrinsic versus extrinsic motivation, in addition, competition as a motivational component is also concerned. Zhang et al. (2020) explain that the most important literature discussed among second language learning are motivational orientations, and multiple theoretical frameworks have been explored to profile the motivational orientation of foreign language learners. Research on motivation is generally viewed as a vital factor in the L2 field. One of the most influential motivation theories for second language acquisition is the socio-educational model proposed by the famous scholar Robert Gardner. The model is relevant to different individual' role characteristics exhibited by the learners in the process of second language learning. The study of motivation in second language learning has been deeply affected by Gardner's work. One of the key issues in Gardner's motivation theory involves the connection between motivation and orientation. Gardner lays stress on the importance of motivation as a prime factor in the socio-

educational model.

According to Dornyei's three-level theory, the learning situation level is made up of intrinsic motivations and extrinsic motivations and motivational conditions. Intrinsic motivation is when a person does something for its own sake, not for an external reward. In this case, doing it is a reward in itself. Al-Qahtani (2013) purports that internally motivated learners are more liable to be rewarded for being interested in the language they are learning and its activities, rather than the external rewards. In the field of education, the intrinsic motivation comes from the students. Intrinsic motivation is in fact the learning experience that the students' natural curiosity and interest inspire them in their language learning activities such as the students' interest in the language, the relativity between second language teaching and students' needs, students' expectancy to learn a foreign language well, their satisfaction towards the language teaching activities, etc. In brief, this kind of motivation focuses on language leaning activity itself.

Generally speaking, extrinsic motivation refers to the behavior of an individual who wants a reward or escapes a punishment. An individual may take part in certain activities not because s/he likes it, or because s/he gets satisfaction, but because these activities can bring some rewards or avoid some punishments. Extrinsic motivation is stimulated by other factors such as the teacher's behavior, character and teaching style. In addition, teacher's presentation, task statement, and teaching feedback have a certain degree of influence on the learners' language learning attitudes and behaviors. Besides the above external factors, other learners, the learning process, the learning materials and so on will also have an impact on the learning motivation of language learners. As a matter of fact, it is proven that in the language classroom, cooperation has more stimulating effect on learners' learning enthusiasm than competition.

Deci et al. (as summarized by Yu, 2020) claims that competition can undermine intrinsic motivation to some extent. He finds in his study that the participants who has competed against others in a language activity have less possibility to return during the free-choice stage than those who haven't participated in any competition. The researcher explains that the main reason for the lack of intrinsic motivation is that the participants pay more attention to the results or winning rather than to the learning activity itself. However, Franken and Brown , as summarized by Yu (2020) argued that there are three reasons account for why competitive contexts is possible to be an origin of motivation. Competition involves the results of success and failure. To put it simply, competition can yield instant feedback on the learners' current level of academic performance and thus can obtain a better grasp on the learners' learning competence and improves their academic achievements.

Conversely, Tomak (2017) researched on students' motivation towards medical English learning. For the purpose of identifying the learners' preferred motivational orientation, 242 students major in medical and healthcare participate in the study. The results on analyzing the primary components show a three-facet solution. The survey's findings show that students majoring in medicine and healthcare are more impacted by integrative motivation than other majors. The pupils have demonstrated higher enthusiasm to learn the English language since they rate their own understanding of the language as being considerably better. In 2013, Malcom (as cited in Єлагіна, 2019) pointed out that medical students had much more motivation when they were offered authentic medical English texts and relevant learning materials were supplied in the medical English class. There provide different materials to be discussed and studies during the Medical English course, e.g. learning and mastering a multitude of medical English terms vocabulary, practicing to pronounce the difficult professional medical words, professional speaking activities in pair, listening and dictating tasks, reading and restating, consulting the latest medical literature, simulating attending important international medical conferences and exchanging and reviewing with international colleagues, etc.

(2) Learning strategies

Generally speaking, learning strategies refer to the methods, techniques, or approaches that learners use to

acquire, process, and retain information. These strategies can be cognitive, metacognitive, affective, or social in nature, and they can be applied to various learning tasks and contexts. Some examples of learning strategies include note-taking, summarizing, self-testing, elaboration, visualization, goal-setting, self-reflection, collaboration, and feedback-seeking. The effectiveness of learning strategies may depend on individual differences, task demands, and learning goals, and they can be taught, practiced, and improved over time. There still exists dispute about the definition of learning strategies among researchers. Using reasoning and generalization, learners use learning strategies to attempt to understand word meaning and usage, grammatical rules, and other language-related concepts.

Another significant area of disagreement is the classification of LLS. On the basis of self-regulation theory, the original taxonomy of six domains—memory, cognition, metacognition, emotion, compensation, and social strategies—has lately been reexamined and reorganized. Vygotsky's sociocultural theory of self-regulation learning (SRL), which she used as the foundation for her strategic self-regulation (S 2R) model. She distinguishes four major categories in her conceptualization—cognitive, emotional, motivational, and social strategies—each of which is governed by the "Main category of meta-strategies." Metacognition, meta-emotion, meta-motivation, and meta-social techniques are some examples of these meta-strategies (Oxford, 2016). Because some theorists (Dörnyei, 2005; Hajar, 2019) contend that language learning success cannot be determined only by the frequency with which methods are utilized, her categorization has once again caused considerable debate.

Memory strategies, cognitive strategies, and compensatory strategies are examples of direct strategies. Learners can save oral data and retrieve it for communication by using memory methods. Learners acquire memory techniques by bodily movements, rhymes, visuals, keyword ways, mechanical means, and postures. They group and make use of context. According to Solak & Cakir (2015), memory techniques aid students in memorizing vocabulary and organization (Oxford, 1990). Studies have looked into several language learning methods. According to Pathomchaiwat's (2013) research, pupils were most likely to hazard a guess or make a clever adjustment.

Metacognition, emotion, and social strategies are all components of indirect strategies. Learners can manage their cognitive and learning demands with the use of metacognitive methods. For instance, according to Ardasheva and Tretter (2013), learners concentrate, plan, organize, arrange, monitor, and assess the learning process.

The application of strategies in relation to other factors has also been the subject of numerous research (Platsidou & Kantaridou, 2014; Rao, 2016; Charoento, 2017; Hab & Magyar, 2018). Language proficiency is one of the most frequently cited characteristics and has been extensively discussed in a number of different ways. The literature on the relationship between English learning tactics and achievement was compiled by Zhang et al. (2013). Learning styles have a considerable impact on English learning, according to Fang (2014). In addition, formative evaluation can help refine and improve learning processes, according to the research. LLS and second language proficiency demonstrated a statistically significant association, according to Taheri et al. (2019). They specifically showed that second language proficiency and cognitive, social, and compensatory mechanisms had a statistically significant link. Strategies have a statistically significant impact on proficiency through attitudes, according to Hab ók and Magyar (2018a).

Additionally, high-level learners frequently employ a technique known as compensating strategies, according to a study by Yustitiasari et. al. (2020). Similar to this, Salahshour et. al. (2013) performed a study to investigate the association between the learners' gender, their level of English proficiency, and the learning tactics they select and employ most frequently. They came to the conclusion that, when cognitive methods were less frequently used, metacognition was. The more talented pupils utilized strategy more.

Charoento (2017) underlines that proficient students tend to employ social techniques, whereas less proficient students tend to use metacognitive strategies more frequently. According to Sánchez (2019), top performers primarily employ social, metacognitive, and cognitive methods. According to some research, there is no discernible

difference in the usage of LLS between students with lower and higher levels of English proficiency (Rianto, 2020). Additionally, numerous studies have demonstrated that students from various cultures, nations, and educational institutions may have various learning styles. For instance, Mazumder (2014) examined the goals and methods of Bangladeshi students attending public and private universities. The Learning Motivation Strategy Questionnaire (MSLQ) was utilized in the study, and the findings revealed no appreciable differences between Bangladesh's public and private universities in the majority of categories. The outcomes were then contrasted with outcomes from two other nations: China and the United States. Some distinctions between Bangladesh, China, and the United States are revealed by the comparison. This variation shows that pupils from various geographic locations may learn in various ways. A study on the impact of language learning techniques and motivation on students' academic performance was undertaken by Cheng et al. (2015). According to the theory explaining the connection between learning methods and motivation, motivated students are more ready to seek out solutions or outside assistance and use more techniques to process new knowledge. The study's findings revealed that only memory methods in the group A posttest differed substantially in the independent-sample t-test analysis. Learners may not be motivated to learn English for a variety of reasons, including teaching strategies, environmental factors, or even personal factors. Playing games may excite one learner while not motivating others in the classroom.

4. Method

(1) Research design

Descriptive design was utilized in this study. As a popular precursor to quantitative study, descriptive research is also practiced in language and culture. It can include quantitative data such as the use of empirical information. Descriptive research requires collecting data that will describe an event and presenting the information in an organized, and often visual manner. Description is used to explain the answer to "what is" and to depict patterns that emerge during a study through a variety of research techniques. Survey is one of the most flexible means for descriptive research. It comprises written questionnaires or interviews. It highlights common responses from interviewees and may help to establish a relationship between various factors. This design allowed the researcher to investigate a large quantity of variables in one study and to examine the relationships among the variables. In the study, the researcher explored into the expected association among medical English learning motivation and strategies.

(2) Participants

Using the Raosoft calculator, from 5000 target population, 400 medical students were established. Random sampling was employed by the researcher. The present study was conducted among the first to fifth year clinical students in one medical university of Zibo city. The student participants of this research were clinical undergraduates with bachelor degree in the Clinical Medical College and they all gave consent to join this thesis study. Some of them have passed CET-4 or CET-6, while the others haven't passed none of the above exams.

(3) Instruments

The questionnaire employed in the study was standardized one validated by experts. In this study, survey instruments used have three principal components. The first section has three demographic items. Participants are required to give the answer indicating their sex, English rating and year level. In the second section entitled Medical English Learning Motivation was composed in 2005 by Dornyei. It consists of 20 Likert-scale questions. The 20 items are divided into three key categories: Extrinsic motivation (8 items), Competition (3 items), Intrinsic motivation (9 items). Participants were asked to respond to statements based on research questions. Moreover, the third section, developing and validating a scale to measure Medical English Learning Strategies was produced by Oxford's in 1990.

It consists of 28 Likert-scale questions. The 28 items span six primary categories. The results of SPSS's analysis are shown in the table. Cronbach's for the Variables and all their sub-dimensions is more than 0.7, indicating that the dependability of the research data is strong and that the items have a reasonably high level of internal consistency. In summary, the scale's dependability meets the requirements for reliability test results.

(4) Procedures

A survey was first conducted to gather data from the participants and to successfully analyze data utilizing statistical tools. The data collection and statistical analysis received from the questionnaires were primarily on the basis of Excel and SPSS. In order to make a better investigation and analysis on the relationships between and among medical English learning motivation and strategies, SPSS software would be applied for further analysis to gain practical information and materials. The researcher conducted a pilot test among 30 clinical students from the medical university, in order to gauge their understanding of the questionnaire and receive their comments and ideas. In the medical university, the researcher conducted the pilot study with the help of the college counselors. The participants were guided to read the questionnaire under the instruction of the researcher, and then were given twenty minutes to complete the questionnaire questions. The researcher made some essential modifications and adjustments to the instrument based on the results.

(5) Data analysis

The demographics of the student responses were described using frequency and percentage distribution in terms of sex, English proficiency rating, and year level. Weighted mean and rank were used to identify the different motivation held by the clinical students in the medical university towards learning medical English with regards to extrinsic, competition and intrinsic aspects; the clinical students' memory, cognitive, compensatory, metacognitive, emotional, and social learning methods for medical English, as well as to ascertain these strategies' effectiveness. Consequently, Spearman rho was used to establish the significance of the link. Utilizing SPSS version 28, all analyses were performed.

5. Results and Discussion

It is showed that the highest weighted mean score for clinical students is 3.24, while the lowest weighted mean score is 3.09. It demonstrates a relatively significant disparity in the Chinese medical university clinical students' medical English learning motivation. Extrinsic motivation is the second highest ranked attribute (3.14).

Among the three medical English learning motivation, competition gets the highest mean value (3.24). It indicates that competition can stimulate clinical students' interest and motivation in learning medical English. In a highly competitive environment, students often actively participate in the classroom activities and learn actively. Competition can also promote communication and cooperation among clinical students. In the process of competing with others, students need to constantly learn and improve, learn to cooperate with others and make progress together. This can improve the team awareness and collaborative ability of clinical students. In addition, competition can promote the personal growth and development of clinical students. In competition with others, students need to continuously strive and accumulate experience to improve their abilities and levels, which can effectively exercise their self-confidence and independent thinking ability, laying a solid foundation for future development. Competition can stimulate clinical students' thirst for knowledge and innovative spirit. In the process of competition, students need to constantly think and explore, actively try new learning methods, which can effectively stimulate the curiosity and innovative spirit of clinical students and enable them to continuously pursue progress and breakthroughs. Finally, competition can also improve the exam scores and academic levels of clinical students, stimulate their creativity and creative potential.

Extrinsic Motivation is the second highest ranked attribute (3.14). Although some scholars believe that “The increase of external motivation will weaken the internal motivation”, but there are also views that external motivation can be used as a means to trigger and consolidate internal motivation, thus, the combination of internal motivation and external motivation is formed. Since most of the clinical students study medical English for the purpose of pursuing the rewards, the teachers can adapt to the students' mentality in medical English teaching and gradually lead the students to study. With the deepening of medical English learning, various methods are adopted to stimulate students' external motivation. Therefore, as the summary of the above analysis results show that for clinical students, in the process of learning medical English, the level of external motivation is below the average, but slightly higher than internal learning motivation. Most clinical students learn medical English mainly in order to graduate or to find a better job.

The mean value of intrinsic motivation (3.09) is relatively lower. It is generally believed that internal motivation can effectively promote students' academic performance, and students with strong internal motivation can participate in learning independently and actively, persevere and endure setbacks and failures. Students with only external motivation tend to choose tasks that are not challenging. Once the goal is achieved, the motivation to learn will decline, and once it fails, it will fail.

It is further revealed that the mean scores for all the three medical English learning motivation aspects are somewhat high, showing that the clinical students in a Chinese medical university have a higher level of medical English learning motivation overall. This demonstrates that the clinical students in a Chinese medical university have realized the importance of medical English learning because since the reform and beginning, with the increase of foreign-related activities, the introduction of advanced technology and equipment, the intensity of learning motivation of clinical students is greatly affected by the social environment of medical English learning. More than half of the students' medical English study is related to their future work and further study. This kind of motivation is very beneficial to the improvement of medical English for most students from the perspective of the current level of college foreign language development, foreign language learning both in and out of the classroom, and the environment of use.

However, this kind of medical English learning motivation has its limitations, because after all, the test-taking and job-hunting motivation, after achieving the goal, this motivation will be saturated. Therefore, foreign language teachers should not only support and encourage students with such motivation, but also guide them to improve their interest in medical English learning. As a whole, the learning motivation of clinical students is positive. The main goal of learning medical English is to improve their ability and return to the society. At present, college education is mainly to prepare students for their future career. When students go to college, the main purpose of their study also changes from entering a good university to finding a good job and earning their own living, in the future career can make a difference, benefit the community, so the ability to pursue and altruistic orientation to become more advanced learning motivation, in order to better give back to the community.

A better understanding of the learning motivations involved in Chinese clinical medicine curricula, as well as the socially and culturally specific motivational elements of the countries concerned, may result from the investigation of the motivational factors of clinical learners in the medical English learning environment. Factors. There are numerous restrictions on the scope, sample size, topic selection, and other aspects of the study due to the complexity and complexity of medical English learning motivation. Future studies are advised to broaden the study's focus, enlarge the sample, and focus on clinical specialties at different institutions to test the dependability and validity of the motivational effects of clinical programs and other learning environments for medical English.

In addition, it is revealed that the overall mean score of 3.14 implies that a majority of respondents were in agreement to the medical English learning strategies. Among the six dimensions, metacognitive strategies had the highest weighted mean, with a value of 3.20. Then followed by Item 6 Social Strategies, another indirect strategies,

with the mean value of 3.17. However, another indirect strategy, that is affective strategies received the lowest mean score of 3.10. Memory Strategies, Cognitive Strategies and Compensation Strategies received the close scores of 3.12, 3.13 and 3.12 respectively.

Metacognitive strategies had the highest weighted mean which showed that the clinical students in the medical university know how to self-regulate and monitor their learning deeds in the course of medical English learning. Social Strategies indicates that the clinical students demonstrate a preference for the use of this strategies by asking for the speaker's or other students' help when they practice medical English. However, another indirect strategies affective strategies suggested that the clinical students pay not too much attention to the affective strategies and that is also more in line with the introverted character of Chinese students. Meanwhile, the direct strategies, that is Item one, Item two and Item three manifest that the clinical students in the medical university perform well in the respect of the application of direct strategies. It means that the students do well in learning medical English through some external measures. Affective strategies were the least frequently used strategies by clinical students in the medical university. The results of affective strategies reflected that students dealt with their emotions not well in the process of medical English learning. Affective strategies are the strategies clinical students use to regulate emotions and attitudes. Affective factors can determine the clinical students' success or failure in medical English learning, in one way or another. Therefore, effective control of affective factors through affective strategies will help the clinical students a lot in their medical English learning. But the clinical students cannot employ affective strategies appropriately. When encountering difficulties in medical English learning, most of them will feel nervous or they perceive these difficulties with apparent unconcern. They cannot adjust their emotions neither regulate themselves. If they do not improve their study in a period or always get low scores, most of them will lose heart and give up medical English rather than encouraging themselves and motivating themselves.

This study has provided many inspirations for the medical English teaching and learning of the clinical students: the Medical English learning of the students is very difficult. The reason is not only the poor foundation, but also the lack of the awareness of learning strategies. The learners cannot choose the appropriate learning strategies according to their own characteristics and make necessary adjustments to meet the new learning needs. The lack of learning strategy awareness and using learning strategy skills is the biggest obstacle to their progress in medical English learning. Therefore, in order to change the current situation and improve the quality and efficiency of medical English teaching, it is necessary to train medical English learning strategies for the students of clinical specialty, to master the use of various strategies, so as to cultivate their awareness of strategies and timely use of appropriate learning strategies in the learning process to promote medical English learning.

6. Conclusions

1.The respondents are more adept at social and metacognitive techniques than the other four dimensions of medical English learning strategies. intermediate in terms of compensatory, cognitive, and memory methods, and weak in terms of affective strategies.

2.There were significant differences in responses concerning medical English learning motivation and strategies when the clinical students were categorized according to sex and English rating yet not significant in the extrinsic and intrinsic motivation when grouped according to year level. In terms of learning motivation and strategies, there is significant difference specifically in terms of rating in English.

3.There is a highly significant relationship among medical English learning motivation and strategies.

References

- [1] Al-Qahtani, M. F. (2013). "Relationship between English Language, Learning Strategies, Attitudes, Motivation, and Students' Academic Achievement" *Education in Medicine*, 5 (3), 19-29.
- [2] Agustiani, M., Ningsih, S., & Muris, A. A. (2021). Students' Learning Motivation Through Edmodo: Blended Learning In Esp Classroom. *Research and Development Journal of Education*, 7 (1), 39- 49.
- [3] Andini, S. D. (2023). The Analysis of Students' Learning Strategies on Speaking at Tenth Grade of SMAS 1AL WASHLIYAH MEDAN. FKIP UMN AI-WASHLIYAH, 20.
- [4] Н. І. Єлагіна, Н. О. Федчишин (2019). Motivation as a Key Component of Teaching English for Medical Students. *МЕДИЧНА ОСВІТА*, 4 (107).
- [5] Ibrahim, M. M., Nat, M. (2019). Blended learning motivation model for instructors in higher education institutions. *International Journal of Educational Technology in Higher Education*, 16(12).
- [6] Iswan, B. (2017). The effect of Students' Language Learning Strategies and Motivations toward Their English Achievements at The English Department of IAIN Bengkulu. Thesis. Postgraduate Program of English Education Department of Teaching and Art. Bengkulu University.
- [7] Jasmina R., Ivana Č. (2018). Vocabulary Learning Strategies used by Medical Students: Croatian Perspective. *Journal of Arts & Humanities* 7(2), 44-58.
- [8] Khazaie I., Mesbah B. (2014). The Relationship between Extrinsic vs. Intrinsic Motivation and Strategic Use of Language of Iranian Intermediate EFL Learners. *Theory and Practice in Language Studies*, 4(1), pp. 99-109.
- [9] Lemos C., Veríssimo R. (2014). The Relationships Between Intrinsic Motivation, Extrinsic Motivation, And Achievement, Along Elementary School. *Procedia - Social and Behavioral Sciences*. 112, 930 – 938.
- [10] Liu L., Wang y. (2019). Research on EMP Term Learning Strategies. 2019 4th International Social Sciences and Education Conference. ISSEC 2019.
- [11] Liu T. T. (2018). An analysis of ESP teaching strategies in medical colleges. *Higher education*, (2), 189.
- [12] Mega, L., Achmad Y. W. (2020). Language Learning Strategies of Undergraduate EFL Students. *Journal of English Language Teaching and Learning*, 1(1).
- [13] Martins R.M.M., dos Santos A. A. A. (2019). Learning strategies and academic self-efficacy in university students: A correlational study. *Psicol Esc e Educ*. 23,1-7.
- [14] Nomura O. (2022). Motivations of Japanese medical students to online medical English course [dataset].
- [15] Neroni J., Meijs C., Gijsselaers H. J. M., Kirschner P. A., de Groot R. H. M. (2019). Learning strategies and academic performance in distance education. *Learn Individ Differ*, 73, 1-7.
- [16] Pavel, E. (2020). *Language learner motivation and strategies in English for medical purposes*. *Philobiblon*, 25(1), 135-148.
- [17] Yu, Y.F., Wang, B. (2019). *A study of language learning strategy use in the context of EFL curriculum and pedagogy reform in China*. *Asia Pacific Journal of Education*, 29.
- [18] Yang, M. (2020). *The Significance of Language Learning Strategies in Efl Class*. *Frontiers in Educational Research*, 3(1).
- [19] Yu, Z. Q. (2020). *Motivational Effects of the Case Method on Chinese ESP Learners*. *Journal of Language Teaching and Research*, 11(3), pp. 399-408.

About the Author

Li,Xiaoyan, Gender: Female, Address: Qilu Medical University Zibo, Shandong, P.R. China 255300.