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## **MEDICAL STUDENTS' ENGLISH LANGUAGE LEARNING: NEEDS AND PERCEPTIONS**

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**Summary.** This study investigated the medical students' English language learning needs and their perceptions of ESP courses in an academic environment. To do this, 100 medical students studying medical sciences in the faculty of medicine in Mashhad, Iran, were selected as the participants. Hutchinson and Waters' target language needs analysis framework was drawn on as the analytic model guiding the study. A needs analysis questionnaire was used for data collection. The questionnaire designed to identify the learners' perceptions of the frequency of English language skills/sub-skills use, the importance of English language learning, their ability in using language skills, their needs of language learning and their preferences of an English language course. After gathering and analyzing the data, it was found that reading skill is given priority by the students in terms of frequency of use, importance and proficiency. It also revealed that students need and prefer training in speaking, listening and communication skills. Considering the students' perceptions of the current ESP course, the findings implied that the English language skills incorporated in the current ESP book for the medical students and the allocated time for this course are not compatible with the English language learning needs and wants of the students.

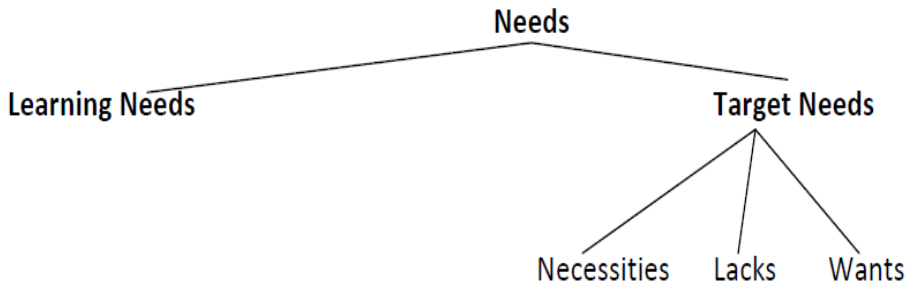
**Keywords:** needs analysis; English for Specific Purposes (ESP); Hutchinson and Waters' needs analysis framework.

### **Introduction**

Due to the fact that English language has become a lingua franca of international communication, teaching and learning English as a second/foreign language has become widespread in today's world (e.g. Wardhaugh, 1986; Coury, 2001; Crystal, 2003; Jenkins, 2004; Kurfürst, 2004; Schwarz, 2003; Seidlhofer, 2005; Yang, 2006). As a means of communication, English language plays an important role in many fields including medical sciences. In addition, Pritchard & Nasr (2004) emphasize that "English is of particular importance for science students because it is the principal international language of science and is looked upon as an effective means for enabling those students to become familiar with professional texts written in English" (p. 246). Since almost all the new medical textbooks are in English,

Kang (2004) emphasizes the role of this international language in medical studies. Kurfürst (2005) and Joesba and Ardeo (2005) highlight the significance of the English for Medical Purposes (EMP) as a sort of English for Specific Purposes (ESP) by providing some reasons. They claim that through learning English, medical students will be able to read medical textbooks, journals and write English articles. In addition, they will be able to prepare themselves for participating in class discussions and international medical conferences. Furthermore, Kurfürst (2005) adds that by learning English, medical students will be able to write patients' history, orders and prescriptions in their future career. As Van Naerssen (1978) explains English for General Purposes (EGP) courses are not satisfactory for medical students. He believes that medical students need courses in which their job-related language needs are illuminated. Thereupon, because of the future needs of medical students, *what/how* to teach English to medical students are controversial issues.

Needs and needs analysis have been key concepts in discussing ESP courses. Wright (1992) explains the language learners with various identities bring their foreign language learning experiences and their language needs into the classroom and hope to be satisfied. Hutchinson and Waters (1987) claim that ESP is a learner-centered approach (not a product) which aims to meet the language needs of particular learners. They add that all the decisions on *what/how* to teach English should be made on the basis of the language needs of the particular learners, which in their view are defined as target needs (what the learners need to do in the target situation) and learning needs (what the learners need to do in order to learn). Hence, Hutchinson and Waters (1987) get across the target language needs analysis process through three distinctive issues: (a) necessities (what is English needed for), involve what the learners have to know in order to function language efficiently in the target situations. (b) lacks (what learners do not know), refer to the gap between what the learners know already and what they need at the present time). (c) wants (what learners feel they need), refer to particular needs (academic or occupational) of the particular learners. Figure 1 below demonstrates Hutchinson and Waters' (1987) taxonomy of target needs.



**Fig. 1. Taxonomy of Target Language Needs  
(Hutchinson and Waters, 1987, p. 54)**

According to a number of researchers (e.g. Al-Tamimi & Shuib, 2008; Al-Fadly, 2004; Hull, 2004; Kavaliauskienė & Užpalienė, 2003) most of ESP learners have low proficiency in the English language. In addition, although having completed their academic studies and graduated from the university, they do not take the advantages of the ESP courses which they took during their academic studies. According to Al-Fadly (2004), learners' low proficiency in English might be due to several reasons, one is the content of ESP books which are not based on the learners' target needs. Therefore, the purpose of this study is to investigate the English language learning needs of the medical students, studying medical sciences in the faculty of medicine in Mashhad, Iran. In doing so, the study focuses on Hutchinson and Waters' (1987) model of needs analysis as the guide for the analysis of the collected data from the academic context. The study, more specifically, tries to identify the medical students' perceptions of the importance and the frequency of the English language skills use, their lacks and needs, and their view toward the current English language course for medical students. The findings can help material developers and syllabus designers adopt appropriate strategies for adapting the course materials to the students' needs, thus enhancing the development of the ESP materials.

## **Review of Literature**

ESP has been defined differently by various scholars (Hutchinson & Waters, 1987; Wright, 1992; Smoak, 1996; Aglaia, 1999; Farhady, 1995). The most common definition for ESP refers to the one which was proposed by

Celani (2008). He defines ESP as an approach which refers to the study of certain aspects of the language to fulfill particular needs of a group of learners. He claims that an ESP course has five basic features: (a) it reflects the learners' learning needs and necessities, (b) it provides the necessary elements for reaching the desired purposes, (c) it uses the learners' previous knowledge, (d) it permits the learners to use language meaningfully, and (e) it helps the learners adopt new learning strategies and leave off the unhealthy learning habits such as repetition and memorization. According to Hutchinson and Waters (1987), ESP has undergone five stages to start emerging. Register analysis, as the first stage, traces back to 1960s and early 1970. As Halliday et al. (1964 cited in Widdowson, 1983) state, the aim of this stage is to identify the grammatical and lexical features of the registers. The second stage refers to discourse or rhetorical analysis. According to Allen and Widdowson (1983), the focus of attention in this stage is on the level above the sentence and how the sentences are combined to produce meaning. The third stage of the development refers to target situation analysis. *Needs analysis*, as Chambers (1980) declares, is the paramount feature of this stage. As Nuttall (1982 cited in Widdowson, 1983) claims, the fourth stage integrates the learning skills, strategies and thinking processes that underlie language use. Finally, the learning-centered approach, as the last stage of ESP development, concerns itself with the understanding of the processes of language learning.

Designing ESP materials and making decisions about the contents of these books without referring to the learners' learning reasons and needs is a desultory task (Yazdjerdi, 2000). As Munby (1991 cited in Silva, 2002) states, needs analysis is an important factor in the specification of an ESP course. Assisting teachers to identify particular needs of the learners and adopt appropriate teaching strategies, satisfying the learners' learning needs and motivating the learners to function language communicatively are the main benefits of needs analysis (Hutchinson & Waters, 1987; Yazdjerdi, 2000; Silva, 2002). Hutchinson and Waters (1987) propose a framework for the investigation of learners' language needs. This framework consists of various questions. Table 1 below illustrates these questions.

Table 1.

**Framework for Analysis of Learners' Learning Needs (Hutchinson and Waters, 1987, p. 63)**

<b>Main Questions</b>	<b>Detailed Questions</b>
<b>1. Why are the learners taking the course?</b>	<ul style="list-style-type: none"> <li>- Is it optional or obligatory?</li> <li>- Does it satisfy their needs?</li> <li>- Is promotion involved?</li> <li>- What do learners think they will achieve?</li> <li>- Do they know the differences between ESP and GE?</li> <li>- What is their perception of the ESP course?</li> <li>- Do they really want to improve their English?</li> <li>- Do they really want to learn communication in English?</li> </ul>
<b>2. How do the learners learn?</b>	<ul style="list-style-type: none"> <li>- What is their learning background?</li> <li>- Who is their teacher?</li> <li>- Is it the same as GE?</li> <li>- What is their concept of teaching?</li> <li>- What is their concept of learning?</li> <li>- What methods will they interested in?</li> <li>- What sort of activities appeal to them?</li> </ul>
<b>3. What sources are available?</b>	<ul style="list-style-type: none"> <li>- Professional instructors;</li> <li>- Attitude of teachers to ESP;</li> <li>- Teachers' knowledge of and attitude to:</li> <li>- Language skills</li> <li>- Subject;</li> <li>- Content;</li> <li>- Methods;</li> <li>- Tasks</li> <li>- Materials;</li> <li>- Aids;</li> <li>- Out-of-class activities.</li> </ul>
<b>4. Who are the learners?</b>	<ul style="list-style-type: none"> <li>- Age/sex/nationality;</li> <li>- What do they know already about English?</li> <li>- What subject knowledge do they have?</li> <li>- What are their interests?</li> <li>- What is their socio-cultural background?</li> <li>- What teaching methods are they used to?</li> <li>- What is their attitude to English?</li> </ul>

Considering the needs of medical students, Mazdayasna and Tahririan (2008) performed a mixed methods study in the medical university of Yazd, Iran. They revealed that most of the students complained about the insufficiencies of the medical books. They also found out that students needed mastery in English language before taking ESP courses. Similarly, Xu and Xiao (2006) and Zhuo (1989) in China and Chia et al., (1999) in Taiwan, declared that most of the medical students after the graduation were not able to use the English language for their job-related purposes such as attending medical meetings, reading instructions of the medical equipment and writing articles. Likewise, Yamanaka (2000), Silva (2002) and Anne (2004) believe that English for

Medical Purposes (EMP) as a field of English for Specific Purposes (ESP) should be developed and taught in a way to enhance the communication skills of the physicians and enable them to use the English language effectively in various job-related situations. In terms of the content of the EMP books, Rahimi (2008) ascertains that the content should be relevant to the medical needs of the learners including understanding scientific texts, reading technical textbooks and searching technical journals as well as knowing technical vocabularies and expressions.

Knowing the principles of needs analysis in developing ESP materials, especially in EMP courses, the present study attempts to investigate the medical students' English language learning needs, drawing on Hutchinson and Waters' (1987) model of needs analysis. Moreover, it aims at describing the medical students' perceptions of the importance of English language skills and their frequency of use. It also describes the medical students' insight toward the current ESP courses in academic contexts.

## **Method**

### **Design**

This study based on Hutchinson and Waters' (1987) approach to needs analysis to investigate the foreign (English) language learning needs of the medical students of the medical sciences studying in the faculty of medicine. Therefore, the study was a multi-methodological research as it involved the collection and analysis of both qualitative and quantitative data (see DÖrnyei, 2007).

### **Participants**

The participants of this study were 100 (60 females and 40 males) students of the medical sciences studying in the academic year 2017 in the faculty of medicine in Mashhad, Iran. All of them were in the third year of their academic career. Since all the participants had passed the ESP courses and had the knowledge of their wants and desires toward the English learning, it was assumed that they were aware of the needs of language learning for medical students. They were aged 21–24. Because an unequal number of males and

females who participated in the study, gender was not considered to be a moderator. Since all the participants had been exposed to EFL instruction for about 4 years during high school, they were completely familiar with the basics of the English language skills and grammatical points.

## **Instrumentation**

The main instrument used in this study was the truncated version of the needs analysis questionnaire which was used by Khaksari (2002), Shuib (2005) and Kaur (1993). To be comprehensible for the participants, it was written in Persian. To tap the criterion-related validity and achieve reliable results, the Pearson correlation coefficient was employed. The questionnaire consisted of seven parts.

In part one, the participants were asked to provide the related demographic information (e.g. gender, age, level of education). In part two, they were required to write their insight and discernment toward the use of English skills. This part consisted of 22 items (8 items about reading, 6 items about writing, 5 items about listening and 3 items about speaking). A five-point Likert scale was used in this part (1= never, 5= always). Parts three and four were adapted from Shuib (2005). They were developed to assess the participants' proficiency in four English language skills (speaking, reading, listening and writing) and four sub-skills (grammar, vocabulary, pronunciation and communication). In these parts, the participants were required to rate their ability in performing English language skills and sub-skills (the same questions in part two). The intensity for each item in the scale ranged from 1 (not efficient at all) to 5 (very efficient).

Part five was developed to elicit the participants' insight of the importance of the English language skills and sub-skills. They were requested to rate the same items in part two (1 = not important, 5 = very important). In part six, the researcher used the same questions of part two to get the participants' perceptions regarding their needs of training to improve their performance in the English language use. Four-point scale was used in this part (1 = no training, 4 = a lot of training). The last part of the questionnaire was adapted from Kaur (1993). It was developed to get the participants' insight of the felicitous and appropriateness of the current ESP courses for medical

students. This part consisted of four questions. In the first question, the participants were asked to rate the usefulness of the ESP courses with regard to their English language learning needs (1 = very useful, 5 = not useful). In question two, the participants were asked to select the language skills or sub-skills which appeal to them. Eight language skills and sub-skills including, speaking, reading, writing, listening, grammar, vocabulary, pronunciation and communication were presented to them. In the third question, the participants were required to determine the type of the English language course that they would like to take part in. Three options were presented to them including English for occupational Purposes (EOP), English for Academic Purposes (EAP) and General English (GE). As the last question, the participants were asked to state whether they were satisfied with the allocated time for the ESP courses. They were asked to specify their responses with "Yes" or "No".

### **Data Analysis Procedure**

After calculating the reliability of the needs' analysis questionnaire (Correlation was significant at the 0.01 level), it was administered to 100 participants of this study who are studying medical sciences in the faculty of medicine. Before the distribution of the questionnaires, the participants were informed of the purposes and the importance of the study. They were also requested to be patient in responding to the questions and be honest in expressing their real ideas. The researcher expressed his gratitude for the time they spent to fill in the questionnaire. After collecting the required data, the researcher analyzed the responses based on Hutchinson and Waters' model of target language needs analysis. Frequency, means and standard deviation of each sections of the needs analysis questionnaire were provided, indicating the participants' needs, lacks and perceptions of the ESP courses.

### **Research Findings**

This study aimed to investigate the English language learning needs of the students of the medical sciences. To fulfill the purpose of the study, Hutchinson and Waters' framework of target language needs analysis was implemented in the analysis of the obtained data. They believed that target language needs



analysis is a learner-centered and process-oriented approach which focuses on necessities, lacks and wants of the learners. The following sections elaborate more on the participants’ responses to the needs’ analysis questionnaire.

### Evaluating the Needs Analysis Questionnaire

Since the main instrument of the study was a truncated version of the target language needs analysis questionnaire, the researcher calculated its reliability before administrating the questionnaire to the target population. To this end, two of the ESP instructors of the same university were asked to review and revise the items of the questionnaire, then the adapted questionnaire was distributed among 50 medical students twice with the interval of three weeks, and then a correlation was run. Table 2 indicates that the correlation of the questionnaire is significant at the 0.01 level. Consequently, the needs analysis questionnaire used in this study enjoyed high criterion-related validity and it was an appropriate instrument for data gathering in this study.

Table 2.

#### Correlation of the Needs Analysis Questionnaire

X	Pearson Correlation	1	.833**
	Sig. (2-tailed)		.001
	N	50	50

\*\* . Correlation is significant at the 0.01 level (2-tailed).

### The Participants’ Perceptions of the Use of English Language Skills and Sub-skills

In part two of the questionnaire the participants were requested to state their perceptions of the use of English language skills and sub-skills. Table 3 below displays the results of the obtained data.

Table 3.

#### The Frequency of the Participants’ Perceptions of the English Language Skills and Sub-skills

	English Language Skills	N	Mean	Overall Mean
<b>Reading sub-skills</b>	1. reading articles and textbooks	100	4.23	
	2. reading medical articles in technical journals	100	4.60	

	English Language Skills	N	Mean	Overall Mean
	3. reading medical and technical manuals	100	3.02	3.51
	4. reading medical texts on the net	100	4.12	
	5. reading instructions of medical instruments	100	3.00	
	6. reading course pamphlets	100	2.65	
	7. reading instructions of drugs	100	3.02	
	8. reading medical notes	100	3.45	
<b>Writing sub-skills</b>	9. writing patient history	100	2.01	2.56
	10. writing articles	100	3.47	
	11. writing test answers	100	2.69	
	12. writing notes	100	2.25	
	13. writing class assignments	100	2.44	
	14. writing project	100	2.50	
<b>Listening sub-skills</b>	15. listening to the medical lectures	100	3.80	3.03
	16. listening to the recorded classes	100	2.21	
	17. listening to instructions and explanations of medical instruments	100	2.77	
	18. listening to presentations in conferences	100	3.78	
	19. listening to explanations of class assignment	100	2.63	
<b>Speaking sub-skills</b>	20. asking questions in class	100	3.25	3.35
	21. participating in class discussions	100	3.12	
	22. giving lectures	100	3.70	

As presented in Table 3 above, among four language skills, reading is perceived to be the most frequently used skill by the participants (overall mean = 3.51). On the other hand, writing is the least frequently used skill (overall mean = 2.56). Speaking skill (overall mean = 3.35) and listening skill (overall mean = 3.03) have received the second and third places.

For the reading sub-skills, the findings revealed that reading medical articles in technical journals (mean = 4.60), reading articles and textbooks (mean = 4.23) and reading medical texts on the net (mean = 4.12) were the most frequently used sub-skills among the participants. Other reading sub-skills, such as reading medical notes (mean = 3.45), reading instructions of drugs (mean = 3.02), reading medical and technical manuals (mean = 3.02), reading instructions of medical instruments (mean = 3.00) and reading course pamphlets (mean = 2.65) were perceived to be used less respectively.

Regarding the speaking sub-skills, the findings showed that giving lectures (mean = 3.70) followed by asking questions in class (mean = 3.25) and participating in class discussions (mean = 3.12) were viewed to be the most often used sub-skills by the participants respectively.

For the listening sub-skills, the findings revealed that listening to the medical lectures (mean = 3.80) was the most frequently used sub-skill, whereas listening to the recorded classes was the least frequently used sub-skill (mean = 2.21). Subsequently, listening to presentations in conferences (mean = 3.78), listening to instructions and explanations of medical instruments (mean = 2.77) and listening to the explanations of class assignment (mean = 2.63) were perceived to be used by medical participants of this study.

Among the sub-skills of writing, writing articles was viewed to be used more frequently than other sub-skills (mean = 3.47). Respectively, writing test answers (mean = 2.69), writing projects (mean = 2.50), writing class assignments (mean = 2.64), writing notes (mean = 2.25) and writing patients history (mean = 2.01) were perceived to be used less.

### **The Participants' Perceptions of the Importance of English language Learning**

In part five of the questionnaire the participants were asked to state their perceptions on the importance of English language learning. Table 4 below represents the results of the gathered data.

*Table 4.*

#### **The Participants' Perceptions of the Importance of English Language learning**

	<b>English Language Skills</b>	<b>N</b>	<b>Mean</b>	<b>Overall Mean</b>
<b>Reading sub-skills</b>	1. reading articles and textbooks	100	4.75	4.09
	2. reading medical articles in technical journals	100	4.50	
	3. reading medical and technical manuals	100	4.00	
	4. reading medical texts on the net	100	4.45	
	5. reading instructions of medical instruments	100	3.70	
	6. reading course pamphlets	100	3.50	
	7. reading instructions of drugs	100	3.75	
	8. reading medical notes	100	4.10	
<b>Writing sub-skills</b>	9. writing patient history	100	3.00	3.15
	10. writing articles	100	4.80	
	11. writing test answers	100	2.75	
	12. writing notes	100	2.85	
	13. writing class assignments	100	3.00	

	English Language Skills	N	Mean	Overall Mean
	14. writing project	100	2.50	
<b>Listening sub-skills</b>	15. listening to the medical lectures	100	4.15	3.33
	16. listening to the recorded classes	100	2.50	
	17. listening to instructions and explanations of medical instruments	100	3.50	
	18. listening to presentations in conferences	100	4.50	
	19. listening to explanations of class assignment	100	2.00	
<b>Speaking sub-skills</b>	20. asking questions in class	100	2.00	3.01
	21. participating in class discussions	100	2.80	
	22. giving lectures	100	4.50	

As shown in Table 4 above, of four language skills, reading was considered the most important one (overall mean = 4.09), while speaking was viewed as the least important skill by the participants (overall mean = 3.01). Respectively, listening (overall mean = 3.33) and writing (overall mean = 3.15) skills were given the second and third places.

Among the sub-skills of reading, the findings revealed that reading articles and textbooks (mean = 4.75), reading medical articles in technical journals (mean = 4.50), reading medical texts on the net (mean = 4.45), reading medical notes (mean = 4.10) and reading medical and technical manuals (mean = 4.00) were considered highly important sub-skills by the participants. On the other hand, reading instructions of drugs (mean = 3.75), reading instructions of medical instruments (mean = 3.70) and reading course pamphlets (mean = 3.50) were considered as the least important ones.

For the listening sub-skills, the results represented that the head sub-skill was listening to presentations in conferences (mean = 4.50) followed by listening to the medical lectures (mean = 4.15), listening to instructions and explanations of medical instruments (mean = 3.50), listening to the recorded classes (mean = 2.50) and listening to the explanations of class assignment (mean = 2.00).

Regarding the writing sub-skills, the results showed that writing article was of paramount importance among other sub-skills (mean = 4.80). Respectively, writing patients history (mean = 3.00), writing class assignments (mean = 3.00), writing notes (mean = 2.85), writing test answers (mean = 2.75) and writing projects (mean = 2.50) were trivialized by the participants.

For speaking sub-skills, the findings revealed that giving lectures was the uppermost (mean = 4.50), whereas, participating in class discussions (mean = 2.80) and asking questions in class (mean = 2.00) were underestimated by the participants.

### The Participants' Proficiency and Lacks in English Language

In parts three and four of the questionnaire, the participants were requested to self-evaluate their proficiency and lacks in English language skills and sub-skills. Tables 5 and 6 below show the results of the obtained data.

Table 5.

#### The Participants' English Language Proficiency

English Language Skills	N	Mean
Reading	100	4.50
Writing	100	3.25
Speaking	100	2.65
Listening	100	2.45
Grammar	100	4.00
Vocabulary	100	4.20
Pronunciation	100	3.10
Communication	100	2.30

As presented in Table 5 above, the findings revealed that the participants' level of the English language proficiency in reading (mean = 4.50), vocabulary (mean = 4.20), grammar (mean = 4.00), writing (mean = 3.25) and pronunciation skills (mean = 3.10) was higher than the average level (i.e., mean = 3.00). On the other hand, their performance in speaking (2.65), listening (2.45) and communication skills (mean = 2.30) was lower than the expected level (i.e., mean = 3.00).

Table 6 below sheds light on the participants' self-evaluation of their lack of the English language skills and sub-skills.

Table 6.

#### The Participants' Self-evaluation of their lack of skills in the English Language

	English Language Skills	N	Mean	Overall Mean
<b>Reading sub-skills</b>	1. reading articles and textbooks	100	4.00	4.03
	2. reading medical articles in technical journals	100	4.00	
	3. reading medical and technical manuals	100	4.00	

	English Language Skills	N	Mean	Overall Mean
	4. reading medical texts on the net	100	4.10	
	5. reading instructions of medical instruments	100	4.05	
	6. reading course pamphlets	100	4.00	
	7. reading instructions of drugs	100	4.00	
	8. reading medical notes	100	4.10	
<b>Writing sub-skills</b>	9. writing patient history	100	3.10	3.20
	10. writing articles	100	4.05	
	11. writing test answers	100	3.10	
	12. writing notes	100	3.00	
	13. writing class assignments	100	3.00	
	14. writing project	100	3.00	
<b>Listening sub-skills</b>	15. listening to the medical lectures	100	2.75	2.38
	16. listening to the recorded classes	100	2.50	
	17. listening to instructions and explanations of medical instruments	100	2.00	
	18. listening to presentations in conferences	100	2.15	
	19. listening to explanations of class assignment	100	2.50	
<b>Speaking sub-skills</b>	20. asking questions in class	100	1.80	1.76
	21. participating in class discussions	100	2.00	
	22. giving lectures	100	1.50	

As shown in Table 6 above, the participants' efficiency in English language skills was in reading (overall mean = 4.03), writing (overall mean = 3.20), listening (overall mean = 2.38) and speaking (overall mean = 1.76) respectively. Regarding the sub-skills of reading, the results found that all items had mean scores that range from 4.00 to 4.10. Consequently, all the participants were efficient in reading sub-skills.

For writing sub-skills, the results revealed that most of the items had mean scores that range from 3.00 to 3.10, except from the writing articles which score higher at 4.05. Regarding the sub-skills of listening, the findings showed that all items had the mean scores that range from 2.00 to 2.75. This denoted that the participants were not efficient enough in listening sub-skills. For three sub-skills of speaking, the results found that all items had the mean scores that range from 1.50 to 2.00, which indicated that the participants were less efficient in these terms.

## The Participants' English Language Needs

In part six of the needs analysis questionnaire the participants were requested to state their needs of training to improve their performance in English language. Table 7 below presents the results of the gathered data.

Table 7.

### The Participants' English Language Needs

	English Language Skills	N	Mean	Overall Mean
<b>Reading sub-skills</b>	1. reading articles and textbooks	100	2.15	1.91
	2. reading medical articles in technical journals	100	3.00	
	3. reading medical and technical manuals	100	1.50	
	4. reading medical texts on the net	100	3.00	
	5. reading instructions of medical instruments	100	2.15	
	6. reading course pamphlets	100	1.00	
	7. reading instructions of drugs	100	1.00	
	8. reading medical notes	100	1.50	
<b>Writing sub-skills</b>	9. writing patient history	100	2.25	2.27
	10. writing articles	100	4.15	
	11. writing test answers	100	1.50	
	12. writing notes	100	1.00	
	13. writing class assignments	100	1.50	
<b>Listening sub-skills</b>	14. writing projects	100	3.25	3.06
	15. listening to the medical lectures	100	3.75	
	16. listening to the recorded classes	100	2.50	
	17. listening to instructions and explanations of medical instruments	100	2.35	
	18. listening to presentations in conferences	100	4.20	
<b>Speaking sub-skills</b>	19. listening to explanations of class assignment	100	2.50	3.81
	20. asking questions in class	100	3.50	
	21. participating in class discussions	100	3.50	
	22. giving lectures	100	4.45	

As Table 7 above shows, of four language skills, the participants' responses revealed that they needed more training in speaking (overall mean = 3.81) and listening (overall mean = 3.06) skills to improve their performance in the use of the English language. On the other hand, in terms of writing (overall mean = 2.27) and reading (overall mean = 1.91) skills they needed less or no training.

Regarding the speaking sub-skills, the findings revealed that students needed more training in giving lectures (mean = 4.45), participating in class

discussions (mean = 3.50) and asking questions in class (mean = 3.50) respectively.

For the sub-skills of listening, the results showed that the participants preferred to be trained more in listening to presentations in conferences (mean = 4.20) and listening to the medical lectures (mean = 3.75). On the other hand, they needed less training in listening to the recorded classes (mean = 2.50), listening to explanations of class assignment (mean = 2.50) and listening to instructions and explanations of medical instruments (mean = 2.35).

Among the writing sub-skills, the results reported that the participants would like to receive more training in writing articles (mean = 4.15) and writing projects (mean = 3.25). The remaining writing sub-skills, i.e. writing patients history (mean = 2.25), writing test answers (mean = 1.5), writing class assignments (mean = 1.50) and writing notes (mean = 1.00) were observed to need less training.

Regarding the sub-skills of reading, the findings represented that the participants only needed training in reading medical texts on the net (mean = 3.00) and reading medical articles in technical journals (mean = 3.00). Other sub-skills, i.e. reading articles and textbooks (mean = 2.15), reading instructions of medical instruments (mean = 2.15), reading technical and medical manuals (mean = 1.50), reading medical notes (mean = 1.50), reading course pamphlets (mean = 1.00) and reading instructions of drugs (mean = 1.00) were viewed to need less or no training.

### **The Participants' Insight into the Appropriateness of the ESP Course**

In the last part of the questionnaire, the participants were requested to express their ideas on the usefulness of the ESP courses in meeting their wants and needs. To this end, the following questions were presented to the participants:

1. How appropriate was the English language course with regard to your English language learning wants?
2. Which skills / sub-skills would you like to receive more training?
3. What type of English language course would you like to take part? EOP/EAP/GE?
4. Was the allocated time for each English language course enough?



The following sections report the participants' responses to these questions.

### ***The Participants' Perceptions of the Appropriateness of the English Language Courses***

Table 8 below reports the students' view of the usefulness of the English language courses for medical students.

*Table 8.*

#### **The Participants' View of the Usefulness of the English Language Courses**

<b>Choices</b>	<b>Number</b>	<b>Percentage</b>
Very useful	7	7%
Useful	16	16%
Of some use	13	13%
Of little use	23	23%
No useful	41	41%

The findings of Table 8 showed that most of the participants (64%) found the English language courses inappropriate or of little use in fulfilling their needs of the English language learning and only 36% of them stated that these courses were useful for them.

### ***The Participants' Desire of English Language skills/sub-skills***

Table 9 below presents those skills/sub-skills which the students prefer to be trained more in.

*Table 9.*

#### **The Participants' Desire of English Language skills/sub-skills**

<b>Choices</b>	<b>Number</b>	<b>Percentage</b>
Reading	10	10%
Writing	10	10%
Speaking	27	27%
Listening	18	18%
Grammar	6	6%
Vocabulary	10	10%
Pronunciation	5	5%
Communication	14	14%

The results of Table 9 revealed that 59% of the participants considered speaking (27%), listening (18%) and communication (14%) skills of utmost importance among other English language skills and sub-skills. Consequently, they believed that these skills should be given priority in the English language courses.

***The Participants' Perceptions of the Type of English Language Course***

Table 10 below shows the participants' responses to the third question. They were requested to express their perceptions with regard to the type of English language course.

*Table 10.*

**The Participants' Perceptions of the Type of English Language Course**

<b>Types of English Language Course</b>	<b>Number</b>	<b>Percentage</b>
English For Occupational Purposes (EOP)	64	64%
English for Academic Purposes (EAP)	23	23%
General English (GE)	13	13%

As the above table indicates, most of the participants (64%) preferred to take part in English for Occupational Purposes (EOP) courses, while a few of them were satisfied with General English (GE) courses.

***The Participants' Idea on the Time Allocated to English Language Course***

As the last question, the participants were asked to state their opinions on time allocated to the English language courses. Table 11 below reflects their feedback on this question.

*Table 11.*

**The Participants' Ideas on the Time Allocated to English Language Course**

<b>Choices</b>	<b>Number</b>	<b>Percentage</b>
Yes	32	32%
No	68	68%

The findings illustrated in the Table 11 indicate that over two thirds of the participants (68%) stated that the time dedicated to the English language courses was not sufficient to reach the demanded level of the English language proficiency.

## **Discussion**

This section consists of two parts: Part one discusses the students' English language learning needs and Part two describes the students' perceptions of the current English language courses.

### **The Students' English Language Learning Needs**

The purpose of the present study was to investigate the English language needs of the medical students in an academic context. To accomplish this, the study drew on the Hutchinson and Waters' (1987) framework of target language needs analysis (necessities, lacks and wants). After gathering data through the needs analysis questionnaire, the following results were found.

Firstly, regarding the medical students' English language necessities, the results of the present study revealed that reading, listening, speaking and writing were the most frequently used English skills and reading, listening, writing and speaking were considered the most important English language skills. It was also found that reading articles and textbooks, reading medical articles in technical journals, reading medical and technical manuals, reading medical texts on the net, reading instructions of medical instruments, reading course pamphlets, reading instruction of drugs, reading medical notes, giving lectures, asking questions in class, listening to the medical lectures, listening to the presentations in conferences and writing articles were the most important and frequently used English sub-skills (see Tables 3 and 4). Thus, it is perceived that reading skill is the number one in terms of frequency of use and importance. The findings are to a great extent consistent with Al-Tamimi and Shuib (2010) and Basturkman's (1998) research data. They investigated the petroleum engineering students' needs of the English language learning. They found out that all English language skills, whether frequently used or not,

were highly important. They also found that writing articles, reading booklets, giving lectures and reading textbooks were the most important and frequently used English sub-skills. The findings are somehow in line with Ghalandari, Nakhle, Razavi and Naghavi (2013), who found out that reading, speaking, listening and writing respectively are the most important English language skills for the medical students. Furthermore, consistent with (Pritchard & Nasr, 2004; Joesba & Ardeo, 2005; Sidek et al., 2006; Hui, 2007), the findings of the present study confirmed the role of English as a lingua franca in medicine community.

Secondly, in terms of the medical students' English language lacks, the findings revealed that the students found themselves proficient enough in reading, writing vocabulary and grammar skills, while they perceived themselves to be less proficient in speaking, listening, pronunciation and communication skills. Moreover, they rated themselves to be weak in writing and speaking sub-skills. More interestingly, although speaking is frequently used by the students, their level of performance in this skill is not satisfactory (see Tables 5 and 6). In line with this study, Ghalandari et al. (2013) indicated that students are not proficient enough in writing and speaking skills and sub-skills.

Finally, regarding the medical students' English language needs, the findings revealed that the students need more training in speaking, listening, writing and reading skills, respectively to develop their language skills (see Table 7).

### **The Students' Perceptions of the Current English Language Course**

Having analysed the findings of the English language learning needs, this section discusses the medical students' view toward the current English language courses.

The findings of the study revealed that the majority of the medical students find the current English language course inappropriate and useless. In other words, the current English language course for medical students is not in agreement with their English language learning needs and wants (see Table 8). Al-Tamimi and Shuib (2010) reported the same results in their study on

petroleum students. In line with these findings, Nunan (1989) stated that "the effectiveness of a language program will be dictated as much by the attitudes and expectations of the learners as by the specifications of the official curriculum" (p. 176). Thus, the students' perceptions of the appropriateness of the English language course would be more important than the stakeholders' perceptions. Contrary, Ghalandari et al. (2013) in their study conducted in the faculty of medicine in Shiraz, Iran, revealed that ESP textbooks are completely compatible with the students' needs.

According to Raluca (2002), most of the learners know their wants and know why they need the English language for, consequently, to fulfill their language learning needs, they can offer what should be incorporated in ESP books. In line with this, the findings revealed that most of the students are interested in speaking, listening and communication skill, thus, in preparing ESP books these skills should be given priority (see Table 9). Additionally, in line with (Al-Tamimi & Shuib, 2010; Hyland, 2006) the findings proved that most of the students prefer English for Occupational Purposes (EOP) type of the English language course to take part in. This could refer to the fact that they would like to use English language communicatively in their workplace, where the English language is considered to be the medium of transactions (see Table 10).

Finally, in line with Al-Tamimi and Shuib (2010), the findings of the current study revealed that the period of three semesters is not sufficient for the students to improve their job-related language skills and become proficient users of the English language (see Table 11). Consistent with them, Hyland (2006) agreed that ESP courses "rarely provide enough time to meet all identified needs, nor adequate time to collect and analyze needs data, which means that teachers typically write their courses on the basis of incomplete information" (p. 74).

## **Conclusion**

This study investigated the pragmatic dimensions of the needs analysis in designing and developing ESP books, by relying on a needs' analysis framework. It identified the medical students' needs of learning English by considering the frequency of their use of English language skills/sub-skills, the

significance of these skills, their English language lacks and wants. Additionally, this study demonstrated the students' insight of the English language courses.

To sum up, concurred with Richards et al., (1985), the study confirmed the significance of the proficiency in English and incorporation of all language skills in designing ESP books. In addition, it emphasized the seriousness of considering learners' needs, lacks and wants in developing ESP books. Abu-Rizaizah (2005) believed that considering the learners' needs and interests in developing ESP books has a significant influence on their motivation to learn, therefore leads to the English language achievement. Moreover, Rayan (2007) believed that involving learners in designing ESP books increases their motivation, fosters their critical thinking abilities, and makes them participate in different language learning tasks and gain proficiency. He also added that incorporating all language skills in an ESP book makes learning more enjoyable in reaching the objectives of the course and subsequently results in effective learning.

Further studies can draw on methodology used in this study but include a larger variety of data to securely generalize the findings. Further studies can also focus on needs analysis of the language learners in other fields of studies. A meticulous investigation of the learners' needs analysis can also lead to designing more practical ESP books.

## References

- Abu-Rizaizah, S. (2005). The process of designing an ESP writing course for engineers in a Saudi company. *University of Newcastle-upon-Tyne ARECLS e-journal*. 2(a3). Retrieved from [http://research.ncl.ac.uk/ARECLS/vol2\\_documents/Saeed/saeed.htm](http://research.ncl.ac.uk/ARECLS/vol2_documents/Saeed/saeed.htm).
- Aglaua, C. M. (1999). *Ethnographic needs analysis as basis for the design of EAP syllabi*. Paper presented at the 34<sup>th</sup> RELC-SEAMEO International Conference, Singapore, April 19.
- Al-Fadly, H. (2004). *The English language needs of medical undergraduates at Hadhramout University*. Unpublished Master dissertation, Universiti Sains Malaysia.
- Al-Tamimi, A. & Shuib, M. (2008). The English language curriculum for petroleum engineering students at Hadhramout University of Science

- and Technology. In Z. Moris, H. Abdul Rahim, & S. Abdul Manan (Eds.), *Higher Education in the Asia Pacific: Emerging Trends in Teaching and Learning* (pp. 115–125). Malaysia: Penerbit Universiti Sains Malaysia.
- Al-Tamimi, A. S., & Shuib, M. (2010). Investigating the English language needs of petroleum engineering students at Hadhramout University of Science and Technology. *The Asian ESP Journal*, 6(1), 1–30.
- Anne, M. (2004). *English and what else?* Paper presented at the Building Foundations 2004 Conference: National Conference of Enabling Educators, University of Newcastle, Australia, 14–16 July 2004.
- Basturkmen, H. (1998). Refining procedures: A needs analysis projects at Kuwait University. *English Teaching Forum*, 36(4), 2–9.
- Celani, M. A. (2008). When Myth and Reality Meet: Reflections on ESP in Brazil. *ESP Journal*, 27, 412–423.
- Chambers, F. (1980). A re-evaluation of needs analysis in ESP. *The ESP Journal*, 1(1), 25–33.
- Chia, H.-U., Johnson, R., Chia, H. L., & Olive, F. (1999). English for college students in Taiwan: A study of perceptions of English needs in a medical context. *English for Specific Purposes*, 18(2), 107–119.
- Coury, J. G. (2001). *English as a lingua franca in the Brazilian academic world*. Retrieved from <http://www3.telus.net/linguisticsissues/linguafranca.htm>.
- Crystal, D. (2003). *English as a global language* (2<sup>nd</sup> ed.). Cambridge: Cambridge University Press.
- Dörnyei, Z. (2007). *Research methods in applied linguistics: Quantitative, qualitative, and mixed methodologies*. Oxford University Press.
- Farhady, H. (1995). On the specificity of purpose in ESP. The proceeding of the second international conference in linguistics and applied linguistics In: H. Farhady (2006). *Twenty-five years of living with applied linguistics, collection of articles*. Rahnama press, 575–586.
- Ghalandari, S., Nakhle, M., Razav, S. A., & Naghavi, M. (2013). The Relevance of Medical ESP Textbooks in Terms of Content and Needs Achievement in Reading and Writing. *ARTESOL English for Specific Purposes Interest Section ESP E-journal*, 3.
- Hui, Z. (2007). Teaching technical English to engineering students. *Sino-US English Teaching*, 4(9). Retrieved from

<http://209.85.175.104/search?q=cache:t4mPS7B4m1MJ:www.linguist.org.cn/doc/su200709/su20070910.pdf+english+for+engineering+students&hl=en&ct=clnk&cd=16&gl=my&client=firefox-a>.

- Hull, M. (2004). *Changing the paradigm for medical English language teaching*. Paper presented at the 2004 International Symposium of English for Medical Purposes, Xi'an, China, 16–19 October 2004.
- Hull, M. (2006). *Whose needs are we serving?* Paper presented at the 2006 International Symposium on English for Medical Purposes, Beijing, China, 18–19 July 2006.
- Hutchinson, T & Waters, A. (1987). *English for specific purposes: A learning centred approach*. Cambridge: CUP.
- Hyland, K. (2006). *English for academic purposes: an advanced resource book*. Taylor & Francis e-Library.
- Jenkins, J. (2004). ELF at the gate: The position of English as a lingua franca. *European Messenger*, 13(2), 63–68.
- Joesba, M., & Ardeo, G. (2005), Student engineers, ESP courses, and testing with Cloze Tests. *ESP World*, 2(10). Retrieved from <http://www.esp-world.info/contents.htm>.
- Kang, S.-J. (2004). *A Korean medical doctor's experiences in learning and use of English in the United States: Individual and environmental affective factors*. Paper presented at the Sixteenth Annual Conference in Ethnographic and Qualitative Research in Education, University of Albany, SUNY, New York, 4–6 June 2004.
- Kaur, S. (1993). *Analysis of the English language needs of consultants at NCVC*. Unpublished Master dissertation, University of South Australia.
- Kavaliauskiene, G. & Užpaliene, D. (2003). Ongoing needs analysis as a factor to successful language learning. *Journal of Language and Learning*, 1(1), 4–11.
- Khaksari, M. (2002). *An evaluation of the ESP courses of Management, Accounting and Social Sciences at the Islamic Azad University, Kerman*. Unpublished M.A Thesis. Islamic Azad University. Shiraz, Iran.
- Kurfürst, P. (2004). *English as a lingua franca of medicine*. Paper presented at the International Conference on English Is Not Enough: Language Learning in Europe, Olomouc, Czech Republic.



- Kurfürst, P. (2005). *English? Sure, but how?* Paper presented at the International Conference on Lingua Summit 2005, Trenčín, Slovakia.
- Mazdayasna, G. & Tahririan, M. H. (2008). *Developing a profile of the ESP needs of Iranian students: The case of students of Nursing and Midwifery. Islamic Azad University of Yazd, Iran.* Sheikhbahee University, Iran. Retrieved from [www.sciencedirect.com/science/journal/14751585](http://www.sciencedirect.com/science/journal/14751585).
- Nunan, D. (1989). *Designing tasks for the communicative classroom.* Cambridge: Cambridge University Press.
- Pritchard, M. & Nasr, A. (2004). Improving reading performance among Egyptian engineering students: Principles and practices. *English for Specific Purposes*, 23, 425–445.
- Rahimi, R. (2008). ESP, an evaluation of available textbooks: "Medical Terminology". Islamic Azad University of Tonekabon, Iran.
- Raluca, N. (2002). Designing an ESP course: a case study. Retrieved from [http://www.biblioteca.ase.ro/resurse/resurse\\_electronice/revista\\_articole.php?r](http://www.biblioteca.ase.ro/resurse/resurse_electronice/revista_articole.php?r).
- Rayan, A. (2007). Learner participation in the design of English for Biotechnology. *ESP World*, 2(15). Retrieved from <http://www.espworld.info/contents.htm>.
- Schwarz, R. (2003). *Global English: Lingua franca or hegemony.* Retrieved from <http://www.chass.utoronto.ca/~cpercy/courses/6362Schwarz2.htm>.
- Seidlhofer, B. (2005). English as a lingua franca. *ELT Journal*, 59(4), 339–341.
- Shuib, M. (2005). *An English language needs analysis of factory production operators in Malaysia: A case study. The Proceedings of International Literacy Conference 2005, 15–16 August, Penang, Malaysia.*
- Sidek, S., Ramachandran, S., & Ramakrishan, R. (2006). From students to students: Adapting technical reports as classroom materials. In J. Mukundan (ed.), *Focus on ELT Materials*: Pearson Malaysia Sdn. Bhd: 152–163.
- Silva, F. (2002). ESP Teaching for Learners in the Health Sciences Field, *Brazilian Journal of Nursing*, 1, 35–40.

- Smoak, R. (1996). What is English for Specific Purposes? Bureau of Educational and Cultural Affairs. *English Teaching Forum*, 41(2), 22–30. Retrieved from <http://forum.state.gov/vols/vol41/no2/>.
- Van Naerssen, M. M. (1978). ESL in medicine: A matter of life and death. *TESOL Quarterly*, 12(2), 193–203.
- Wardhaugh, R. (1986). *An introduction to sociolinguistics*. Oxford: Blackwell.
- Widdowson, H. G. (1983). *Learning purpose and Language use*. Oxford: Oxford University Press.
- Wright, C. (1992). *The Benefits of ESP*. Cambridge Language Consultations. Retrieved from <http://camlang.com/art001.htm>.
- Xu, J., & Xiao, X.-Y. (2006). Need analysis of medical postgraduates' English language learning. *China Higher Medical Education*, 7, 33–34.
- Yang, H.-Y. (2006). *A needs analysis of English: Perceptions of faculty and doctoral students*. Unpublished master's thesis, National Chiao Tung University, Hsinchu.
- Yazdjerdi, K. (2000). *A summative evaluation of two ESP courses in Engineering at the Islamic Azad University*. Shiraz branch. Unpublished M.A. Thesis. Islamic Azad University of Shiraz, Iran.
- Zhuo, X.-M. (1989). English curriculum for medical students in the People's Republic of China. Doctoral dissertation, University of Massachusetts Amherst, 1989, *ProQuest*.

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**ANGLŲ KALBOS KURSAI MEDICINOS STUDENTAMS: POREIKIAI IR SUVOKIMAS**

**Santrauka.** Šiame tyrime nagrinėjamas medicinos fakulteto studentų anglų kalbos poreikiai ir jų nuomonė apie specialiosios anglų kalbos (ESP) kursus akademinėje aplinkoje. Tyrimui buvo pasirinkti 100 medicinos studentų, besimokančių Medicinos mokslų fakultete Mašade, Irane. Kaip analitinis modelis pasirinkta Hutchinson ir Waters tikslinės kalbos poreikių analizės sistema. Duomenų rinkimui buvo naudojamas poreikių analizės klausimynas, kuris skirtas nustatyti besimokančiųjų nuomonę apie anglų kalbos įgūdžių naudojimo dažnumą, anglų kalbos mokymosi svarbą, gebėjimą panaudoti kalbos įgūdžius, kalbos mokymosi poreikius ir pageidavimus mokytis tam tikrų anglų kalbos specifiniais tikslais kursų. Surinkus ir išanalizavus duomenis buvo nustatyta, kad pagal vartojimo dažnumą, svarbą ir gebėjimus medicinos studentams svarbiausi yra skaitymo įgūdžiai. Tyrimas taip pat parodė, kad studentai jaučia poreikį ir teikia pirmenybę kalbėjimo, klausymo ir bendravimo įgūdžių lavinimui. Atsižvelgiant į studentų nuomonę apie dabartinį ESP kursą, galima daryti išvadą, kad anglų kalbos įgūdžių lavinimas, esantis dabartiniame ESP vadovėlyje medicinos studentams, ir laikas, skirtas šiam kursui, yra nesuderinti su studentų anglų kalbos mokymosi poreikiais ir pageidavimais.

**Pagrindinės sąvokos:** poreikių analizė; specialioji anglų kalba (ESP); Hutchinson ir Waters poreikių analizės sistema.