



ESP Needs Analysis of Sophomore Physiotherapy Students

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ABSTRACT

The current study has been designed to investigate the needs analysis of Turkish ESP students of the School of Health Sciences. It aims to investigate the foreign language needs of undergraduate students in the Physiotherapy department. A total of 68 students from two ESP classrooms have participated in the study as well as two English instructors offering ESP courses to Physiotherapy students. Within this context a mixed-method research design is used, the study is based on both quantitative and qualitative data using semi-structured interviews, and questionnaires. The needs analysis questionnaire was originally developed by Khan (2007). According to the findings, students saw English as a tool for success in their current academics as well as in their future careers. Their interest in improving their writing and listening skills might be a result of their future goals, but the curriculum does not give the required tools, according to teacher interviews. Both parties agreed that the conventional method of teaching and teacher responsibilities should be abandoned in favor of a more modern approach in which the instructor directs pupils and encourages learning. The findings also indicated a gap between students' needs and teachers' perspectives and opinions. To develop an effective curriculum, administrators and material designers must consider student demands, as well as any required adaptations to materials.

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1. Introduction

In a world where people are trained to heavily specialize in their respective fields, the language needs of the learners are bound to specialize accordingly. Therefore, needs analysis is an important aspect of curriculum planning in English for Specific Purposes (ESP) courses. As GE (General English) courses started to not meet learners' needs in the late 1960s and 1970s, ESP research has increased significantly (Hutchinson and Waters, 1987). English is used for various purposes such as business, communication, etc. by native speakers of English (Harding, 2007). As Harding (2007) puts forwards, one of the professional needs of learners is becoming English and as English becomes more widespread around the world as the language of trade and business, the importance of it also grows at the same rate. Due to this, countries started to put more resources towards ESP education, and it has also become prominent in Turkey as more and more universities offer ESP courses for a wide range of departments. ESP, which used to consist of memorizing technical vocabulary and translation, has been slowly integrated into ELT, and approaches/methodologies are being developed to improve the efficacy of ESP courses (Kırkgöz, 2019). For these reasons, needs analysis is of a great importance to create curricula that meet students' professional and academic needs.

As for reasons noted, needs analysis is an integral part of the curriculum and syllabus design. This needs analysis is conducted to investigate the needs of physiotherapy students and their perceptions

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on ESP curriculum, and the perceptions of their instructors. To accomplish this, two research questions were addressed as follows:

1. What are the needs of physiotherapy students currently enrolled in Medical English courses?
2. What are the perceptions of ESP instructors towards the existing program in terms of the students' needs?

2. Literature Review

2.1. ESP

There are quite a few reasons that ESP has more emergent over the years (Coleman, 2010). This affected the development of language teaching as it pressured the language teaching profession to meet the demands, needs, and wishes of people other than language teachers (Hutchinson and Waters, 1987). According to Coleman (2010), English has a major role in countries that participate in the global economy and achieve development through knowledge and skills. This requires learners to continually develop and access information to become economically equal and employable. These reasons lead to the consideration of learning and teaching English for Specific Purposes.

ESP is different from EGP (English for General Purposes), for it emphasizes the learners' purpose of learning English. ESP learners are usually adult learners who are training themselves for a profession such as engineering, tourism, medicine, and others (Belachew, 2020).

Many researchers defined ESP and its implementation in the classroom (Hutchinson and Waters, 1987; Dudley-Evans, St. John and St John, 1998). Hutchinson and Waters (1987) define ESP as an approach to language learning and it is based on what learners need. In other words, ESP does not involve a specific set of methodology nor does it involve a particular kind of language. They note that ESP is built on the learner, the language needed, and the context for which language is required. Dudley-Evans, St John and St. John (1998) built on that definition and state that ESP is divided into absolute and variable characteristics to avoid arguments about what is and is not ESP. They further divide ESP into EAP (English for Academic Purposes), which refers to English that relates to academic studies, and EOP (English for Occupational Purposes), which refers to work-related needs and training, such as law, medicine, and business.

2.2. Needs Analysis and ESP

Needs analysis (NA) is an instrument for gathering information about learners' needs so that it is possible to outline the target context and study environment for teaching English (Otila, 2015). The need analysis begins with a target context study, based on the goal and product-oriented needs, according to Benavent and Sánchez-Reyes (2015). Followed by an overview of the academic situation, information about contextual conditions and the means to acquire information about educational situations are presented. Needs Analysis has been fundamental as the first step in preparing an ESP course (Dudley-Evans, St John and St John, 1998; Stapel, 2016; Robinson, 1991). NA is defined as a systematic and ongoing process of gathering information about learners' needs and preferences, interpreting the information, and making course decisions based on learners' needs (Graves and Xu, 2000). Robinson (1991) states that analysis of the target tasks, linguistic features, and knowledge requirements of the context are what proceeds a successful ESP course. Needs can be translated into target needs, lacks, personal aims and learning needs, subjective and objective needs, perceived and felt needs (Berwick and Johnson, 1989).

As ESP can be divided into sub-categories and each context has specific needs, (Dudley-Evans, St John and St. John, 1998) the results of NA in each context vary. Talebinezhad and Najafi (2018) conducted a needs analysis on medical students in Iran. They concluded that using collocations for vocabulary retention is both more favorable and effective. Labassi (2009) concluded that ESP courses focus mainly on reading skills in academic settings. However, learners perceived writing as the most important skill to develop. In this study, it was reported that students' writing skills as the lowest of all, mainly because of the lack of attention given to writing in classrooms.

In research conducted by Al-Kadi (2018), it is argued that medical students use English primarily for studying, e.g., reading textbooks, reference books, and handouts, followed by taking international tests (TOEFL) and attending seminars. Furthermore, students stated they need English in the classroom more than in the lab and clinics. However, the ESP courses primarily focused on vocabulary acquisition and listening skills. In addition, learners perceived oral communication as almost as important as reading skills, stating that they are required to give presentations and interact with the teachers. Vocabulary and listening were given the highest importance by both the students and teachers, as 95% of students stated they need medical terminology and listening skills to be successful in their studies. The findings reveal that all four language skills and vocabulary are of utmost importance for medical students.

The study conducted by Moslemi (2011) reported that physiotherapy and biology students primarily need reading skills and grammar knowledge to read, understand and translate textbooks. Students also stated that their English proficiency was not high enough when enrolling in the ESP course. Students were satisfied with the content as the course focused on reading and vocabulary, but they stated that reading and translation strategies were not taught.

In a case study by Rushwan (2017), the results revealed that comprehension skills are essential for medical learners as overall proficiency levels in ESP classes are not as high as needed and understanding and being able to translate is important for learners. Furthermore, Rushwan emphasizes the importance of using the target language in the classroom so that students can accumulate specialized vocabulary. In addition, due to the low level of English of the students, teachers being bilingual was advantageous.

2.3 Learners' and Teacher' Perceptions of ESP

Perception is one of the several elements of affective variables in second language learning (Gardner and MacIntyre, 1993). Language teachers' belief and understanding of teaching and learning play an important role in teachers' classroom practices. Perception and attitude affect teachers' goals, materials, classroom interaction patterns, their role, and their students (Harste and Burke, 1977).

Robinson (1991) defined ESP teachers as those who are researchers, course designers, material writers, testers, evaluators as well as classroom teachers. This shows that an ESP teacher faces many challenges. Hutchinson and Waters (1993) state three main problems that ESP teachers face. One of them is the subject knowledge the teacher needs to possess of interdisciplinary content. The second one is the change of the role from a general language teacher to ESP teacher and the final problem is that ESP is comparatively new and does not have clearly defined traditions and methodology.

In a study conducted by Salih and Ali (2013), teachers perceived views on ESP were investigated. The results showed that teachers see NA in ESP courses as mandatory. Furthermore, the production of in-house materials is seen as more favorable than using books as each class and department in different institutions have different needs. 78% of teachers also agreed that NA helps in effective materials production and that students' views are crucial while designing the course.

Another important study on needs analysis in the medical context was conducted by Salehi, Khadivar, Babae, and Singh (2015). The results showed that learners perceived the ESP course only as a way to learn medical terminology and descriptions in English and that not enough attention was given to improving the four language skills. They also found their book un motivating but agreed on the relevance and importance of the content. Teachers agreed with the students on the demotivational aspect of the book and stated that they constantly need to prepare extra materials. Contrary to students' perception, teachers stated that there is a balance of the four language skills with some emphasis on vocabulary.

In a case study by Kırkgöz (2019), ESP in teacher education was investigated in the Turkish context. Data was collected via interviews. It was reported that participants agreed on the importance of needs analysis in ESP as it cannot be standardized as general English instruction. Also, participants stated

that the most difficult aspect of teaching ESP is to study for the terminology of other fields, which is in line with the results of previous studies (Hutchinson and Waters, 1993; Salman and Salih, 2013). In conclusion, ESP has been an emergent field of study due to its importance in a global world. The various sub-categories create the need for more research on this field, especially in Turkish contexts.

3. Methodology

3.1. Design

The purpose of this study is to determine the needs of Physiotherapy ESP students and investigate their teachers' perspectives on the ESP curriculum. Within this context, a mixed-method research design is used. A mixed-method research design is described as a method that aims to gather, evaluate, and combine quantitative and qualitative data and use them in a single study or collection of studies (Creswell and Clark, 2011). Creswell and Clark (2011) emphasize that integrating quantitative and qualitative analysis techniques offers wider and more comprehensive information, each offering complementary information to address the limitations of one of the methods of research.

3.2. Participants and Setting

The participants in this study were 68 sophomore undergraduate students, who were enrolled in ESP for Physiotherapy course in a foundation university in Turkey. Convenience sampling method was used, and all participants were from the Physiotherapy department. The ESP course is compulsory for the students. The students took a placement test at the beginning of their freshman year and were separated into A2 and B1 classes. Objective Placement Test Designed by Cambridge University Press was used for this placement test, and it consists of listening, reading, and language use parts. However, they did not take a placement or proficiency test later for their ESP course, which resulted in a mixed-level classroom. Furthermore, two instructors that were teaching this course participated in this study voluntarily. The instructors had been working at the university for two years with no prior ESP experience.

3.3. Data Collection Tools

In this study, data was collected through an ESP needs analysis questionnaire and semi-structured interviews with the teachers. ESP Needs Analysis questionnaire and interview questions were adapted from Khan (2007). It contained 12 items about needs regarding ESP. Semi-structured interviews contained 5 pre-written questions with additional follow-up questions based on participants' answers.

3.4. Data Analysis

The analysis of the ESP needs analysis questionnaire was done quantitatively. Descriptive statistics, such as the mean score, standard deviation, and median, were used to interpret the data. To calculate these statistics, SPSS 22 was used. As for the open-ended questions in the questionnaires of the instructors, qualitative analysis was applied to interpret the responses. Consistency data analysis is an interpretative method; the researcher is tuned to an extensive and reflective process and aims to achieve replicated data interpretation parameters (Creswell and Clark, 2015). To achieve this, two of the researchers conducted the content analysis. The findings of qualitative analysis and the results of quantitative analysis were also compared and analyzed to reveal any similarities or differences between students' needs and teachers' perspectives.

4. Results and Discussion

4.1. The result of the ESP needs analysis questionnaire

The data collected from the ESP needs analysis questionnaire were analyzed through descriptive statistics to gather information. All the questions were analyzed separately to have a detailed picture of the learners' needs.

The first question aimed at finding the reason why the students need to learn English and the results can be seen in Table 1.

Table 1. Answers for the first question

		f	%
<i>Why do you need to study English?</i>	Higher Education	18	26,5
	Success for future profession	45	67,6
	Speak to foreigners	4	5,9
	Other	-	-

While students reported that they use English primarily for studying, %67,6 (45) of students reported that their purpose for learning English is to be successful in their future jobs. 26,5% (18) of students stated that they are studying English for higher education while only 4 students stated their purpose of learning English as speaking to foreigners.

The second question was about the setting where they use English, and the responses can be seen in Table 2.

Table 2. Answers for the second question

		f	%
<i>When do you use English?</i>	When studying	60	88,2
	When socializing	8	11,8
	At home	-	-
	Other	-	-

As table 2 shows, 60 students reported that they use English when studying while 8 students stated that they use English when socializing. Furthermore, none of them uses the language at home, or for other purposes.

Next, the participants were asked about where they anticipate using the English language, and the results can be seen in Table 3.

Table 3. Answers for the third question

		f	%
<i>In the future, I shall be using English for.</i>	Higher education	24	35,3
	Job/ career	36	52,9
	Socializing	8	11,8
	At home	-	-
	Other	-	-

As seen, most of the participants anticipated to use English in a professional setting; either in a job/ career (52%) or in higher education (35,3%).

As for the fourth question, it was aimed to see whether the students would like English to be taken away from the school curriculum? The response rates can be seen in Table 4.

Table 4. Answers for the fourth question

		f	%
<i>Would you like English to be taken away from the school curriculum?</i>	Strongly disagree	20	29,4
	Disagree	16	23,5
	Neutral	10	14,7
	Agree	16	23,5
	Strongly agree	6	8,8

As shown in the table above, 32,3% (22) of students are in favor of taking English away from the school curriculum while 52,9% (36) of students would like English to stay in the curriculum. 14,7% (10) of the students remained neutral on this statement.

Table 5 shows the responses to the question “Do you think if a student’s level of English is not good it can have...”.

Table 5. Answers for the fifth question

		f	%
<i>Do you think if a student’s level of English is not good it can have...</i>	a good effect on academic performance	-	-
	a bad effect on academic performance	18	26,5
	No effect at all on performance	50	73,5

As can be inferred, a great majority of the participants (50) do not think that English would lead to success in their academic life. While the majority of participants stated that their use of English is for their studies on a previous question, this table reports that 73,5% of students think that having poor English proficiency would not affect academic performance. The rest of the participants disagree with this notion and state that it would have a negative effect on performance.

The next question addressed the process of studying for the content subjects and the results can be seen in Table 6.

Table 6. Answers for the sixth question

		f	%
<i>Do you face difficulty in studying content subjects like theories and terminology because of your poor English?</i>	I face a lot of difficulties	18	26,5
	I face a little difficulty	22	32,4
	I face no difficulty	28	41,2

As can be seen, only 41,2% (28) of participants stated that they have difficulties with content subjects and terminology because of their English level while 32,4% (22) and 26,5%(18) of students stated that they face little and a lot of difficulties, respectively. This contradicts with the results of the previous item where the majority of participants stated that English would not affect academic performance.

Question seven addressed the students’ perceptions of skill emphasis in the classroom and the results can be found in Table 7.

Table 7. Answers for the seventh question

		f	%
<i>Which skills are emphasized in the class?</i>	Reading	30	44,1
	Grammar	38	55,9
	Listening	-	-
	Vocabulary	-	-
	Writing	-	-
	Speaking	-	-

As can be seen in Table 7, 44,1% (30) of participants stated that reading is emphasized in classes while 55,9 % (38) of the participants stated that it is grammar. There were no mentions of other language skills for this question.

On the other hand, the next question was asked to see which skill the learners wish to develop, and the results can be seen in Table 8.

Table 7. Answers for the seventh question

		f	%
<i>Which of the following areas do you wish to develop more?</i>	Reading	2	2,9
	Grammar	2	2,9
	Listening	28	41,2
	Vocabulary	2	2,9
	Writing	30	44,1
	Speaking	4	5,9

As seen, writing and listening were the two skills that students want to develop the most with 44,1% (30) and 41,2% (28), respectively. The two skills that were perceived as emphasized by the students –

vocabulary and reading – were the skills the least number of students wish to develop with 2,9% of students wishing to develop reading skills and 2,9% of students wishing to develop vocabulary.

In the eighth question, the aim was to see the students’ preference on the type of English classes.

Table 8. Answers for the eighth question

		f	%
<i>What kind of English class do you like?</i>	A class with a lot of activities, pair/group work, and projects	60	88,2
	Teaching only by the teacher and no activities by students	8	11,8

As can be seen in Table 8, the majority of students reported that a class with a lot of activities and pair/group work is more favorable with 88,2% of participants in favor of this notion while 11,8 % (8) students preferring classes that is only taught by the teacher.

Table 9. Answers for the ninth question

		f	%
<i>How do you prefer to do learning activities in the class?</i>	Preference for working in pairs or groups	60	88,2
	Preference for working alone	8	11,8

In line with the results of the previous item, 88,2% of participants prefer to work in pairs or groups while 11,8% (8) of participants stated that they prefer working alone, as can be seen in the results of the next question.

Table 10. Answers for the tenth question

		f	%
<i>What kind of role do you like your teacher to have?</i>	Preference for the role of the teacher as a facilitator	44	64,7
	Preference for the traditional role of the teacher as someone in control of everything in class	24	70,6

When asked about their preference of the role the teacher should have in class, 64,7% (44) of participants stated that they prefer the teacher to embrace the facilitator role while the rest of the participants preferred a more traditional role, where the teacher is in control of everything in the class.

Finally, students’ perceptions regarding their improvements of English language skills, they were asked “What do you think about the improvement of your English knowledge?” The findings can be seen in Table 11.

Table 11. Answers for the tenth question

		f	%
<i>What do you think about the improvement of your English knowledge?</i>	English level is not improving	10	14,7
	English level is improving	58	85,3

While students’ perceptions were diverse, 85,3% (58) of the students think that their English level is improving while 14,7% (10) of the students disagree with the others.

4.2. Teacher Interviews

In order to gain insight into the English curriculum, class dynamics and teacher perceptions, semi-structured interviews were conducted with the two English Instructors that offered ESP for Physiotherapy courses. Their answers were analyzed and compared with the questionnaire results. The interview questions were focused on similar topics as the questionnaire to understand the differences between student and teacher perceptions of the curriculum and its implementation and effectiveness. Instructors will be referred as Instructor A and Instructor B.

As per the results, students stated that they primarily use English for their studies. This is in line with Al-Kadi’s (2018) study where it was reported that medical students used English for academic

purposes such as reading and understanding textbooks, and articles. The difference in proficiency levels seemed to not influence this as both A1 and B1 students stated the same purpose. The instructors seem to be aware how the purpose for students' English usage is important for carrying out the curriculum as both mention the different approaches one must take to improve students' English accordingly.

[...] a factor that should be taken into account is the purpose for which the students are learning the language. If the students are expected to live abroad or work in a place where English is the primary means of communication, then more focus should be placed on fluency. (Instructor A)

On the other hand, most of the students also stated that English proficiency would not affect their academic performance which contradicts their previous statement. However, the majority of the students agree on the fact that they experience difficulties while studying due to poor English levels. These results are similar to Moslemi's (2011) study where it was reported that students did not have sufficient language knowledge before enrolling in an ESP course. It can be suggested that more importance should be given to students' English level in a preparatory school to provide them with sufficient proficiency to ease the transition to ESP courses.

The emphasis of lessons is perceived to be vocabulary and reading by the students as the other language areas were not even selected by the students. Several studies (Labassi, 2009; Moslemi, 2011; Rushwan, 2017; Al-Kadi, 2018) have concluded that vocabulary and comprehension are important for students in health departments. However, the results also show us that students want more emphasis on other language skills, primarily listening and writing. Labassi (2009) states that writing is a skill that is not given enough attention in the class due to the heavy emphasis on reading and vocabulary and this is in line with the questionnaire results.

In contrast to students' wants, the instructors agree on the importance of vocabulary, grammar, and reading as the main areas to focus on.

[...] ESP syllabus should focus on technical vocabulary along with basic competency distributed somewhat evenly among receptive and productive skills so they can get by if they find themselves in a situation where they absolutely must use English (for example if they have to deal with a foreign patient). (Instructor A)

[...] Especially for physical therapy, the syllabus should involve vocabulary knowledge. At the end of the course, students should be able to understand scientific studies in their field. (Instructor B)

It can be concluded that there is a conflict between student wants and teacher perceptions on skill development.

In terms of classroom activities and teacher roles, students were in favor of a modern style of teaching, with pair/group work activities. Many students also preferred the teacher to be a facilitator for activities rather than occupying the traditional teacher role of the center of knowledge.

On this topic, instructors and students seem to agree as both instructors stated that traditional teacher roles have no place in an ESP class. Instructor B stated that the main purpose of a teacher is to involve the students in the process and facilitate their learning while Instructor A stated that the teacher should be a guide, rather than a knowledge-giver.

When asked what the best methodology is for ESP courses, the instructors replied with similar answers.

[...] I often encounter exercises in the book that depict situations my students will never encounter throughout their entire career, so they have very little practical value. Hence

whenever I teach, I always try to adapt the material so that it is relevant to the students.
(Instructor A)

This view is in line with the results of Salih and Ali's (2013) study where teachers put heavy emphasis on in-house materials for personalization and more efficient lessons.

5. Discussion and Conclusion

This needs analysis was seeking answers for two main questions. The first question was on the needs of physiotherapy students enrolled in ESP courses. The second was on the perceptions of ESP instructors on the ESP curriculum. The results from questionnaires, interviews, and literature reveal that Medical English courses seem to be emphasizing vocabulary and comprehension, while students want and need to be proficient in all four skills as well as vocabulary and grammar. It is clear that there is a discrepancy between students and instructors in this regard and it could be suggested that students' wishes should be taken into consideration while designing the ESP curriculum.

According to the results, students perceived English as a tool for succeeding in their current studies and for success in their future careers. Their interest in developing writing and listening could be a result of their future ambitions but the curriculum does not provide the necessary resources as can be interpreted from instructor interviews. As several studies suggest (Labassi, 2009; Moslemi, 2011; Rushwan, 2017; Al-Kadi, 2018), all four skills should be emphasized to prepare students for a wide range of career options.

One area where instructors and students had aligned views was on how the lessons should be carried out and teacher roles. Both parties were in favor of abolishing the traditional way of teaching and teacher roles for a more modern approach where the teacher guides the students and facilitates learning.

In conclusion, this study revealed that there is a disconnection between the students' needs and teachers' views and perceptions. To design an effective curriculum, student needs should be considered, and necessary adaptation of materials should be made considered by the administrators and material designers.

5.1 Limitations of the Study

There was no room for follow-up questions and the chance for an up-to-date proficiency test that indicates students' English level. Due to time constraints, a pre-posttest design could not be implemented to measure how students' perceptions and needs changed over time.

5.2. Suggestion for Future Research

The study was conducted at a private university in Turkey with 2nd-year physiotherapy students. Similar studies could be conducted with participants from different settings and health departments. A replicated study with a larger sample size could be conducted to confirm the results. In addition, a qualitative study on the same topic can be conducted to gain more insight into students' individual needs.

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