PERCEIVED LANGUAGE NEEDS OF UNDERGRADUATE MEDICAL STUDENTS ENROLLED IN A CONSECUTIVELY RUNNING ESP COURSE

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Abstract. *English for Specific Purposes, both a separate branch and an approach to English language teaching, is based on needs analysis as its defining feature (Carter and Nunan 2001). Driven from the understanding that learners' needs should be considered for an effective ESP course, this study examines the language needs of Turkish undergraduate medical students enrolled in an ESP course consecutively running in their program. With these in mind, 2nd and 3rd graders (N=88) studying in the 2016-2017 cohort of a Turkish state university in School of Medicine responded to a 26-item, 4-point Likert scale assessing their needs for four macro language skills; listening, reading, speaking, and writing. The descriptive analysis of the data revealed that for both groups reading skills are needed the most, and followed by speaking, writing, and listening skills. Despite slight variations between the skills, the overemphasis put on reading skills in both groups could primarily suggest that the learners are at a stage whereby they need to be equipped with knowledge and information on their major. Thus, they naturally perceive to gain knowledge and development in their prospective profession through reading textbooks and other printed materials. The findings could also suggest how to plan the likely content to be covered in ESP courses for medical purposes.*

Key words: *ESP, needs analysis, language skills, medical English*

1. INTRODUCTION

Undergraduate education is of vital importance as it provides learners with chances to get prepared for a crucial stage, which is their career, mainly through the coursework being delivered in their faculty program. Whatever the program is, English, as the lingua franca for business, communication, science, technology, and also education, is a priority worldwide. In this regard, the importance and emphasis being attached to English in medical schools is no exception, mainly because being proficient in English is fundamental for medical students, especially for those wishing to acquire and develop their skills by following the changes and developments in their field. Besides, an important part of medical professionals' career requires them to reach extensive medical literature, which is mostly in English, to communicate with colleagues and patients, or to attend conferences and seminars as strategies adopted to maintain and further their professional development. For these reasons, medical students need to acquire knowledge and skills of English language through the courses that are

specifically included in their undergraduate program and catering for teaching English for Specific Purposes (hereafter ESP).

In this regard, ESP can be, but it does not necessarily have to be aimed at a certain age group or ability range, but it should be seen as an approach to teaching, or an attitude of mind in which all decisions as to content and method are based on learners' reasons, needs in other words, for learning (Anthony 1997). For this reason, Kern, Thomas, and Hughes (2009) state that a curriculum that does not keep pace with the needs of its learners, its faculty, its institution, and also its resources does a disservice to its constituents, and is likely to deteriorate or die prematurely. Akyel and Ozek (2010) also emphasize that the answer to how practitioners develop effective curricula often lies in needs analysis as a powerful tool helping to clarify and validate true needs, and accordingly, to develop objectives to meet the needs, to include appropriate content in the syllabus, and to design or select appropriate materials, and also to select and use appropriate assessment and evaluation methodology. Thus, assessing the language needs of undergraduate medical students is an important step that needs to be taken to facilitate the effectiveness and efficiency of ESP courses in their undergraduate faculty program.

Being aware of the role of needs analysis in ESP, researchers from various countries have attempted to asses language needs of medical students, (see Naruenatwatana and Vijchulata 2001; Javid 2011; Hwang 2011; Iravani and Saber 2013; Faraj 2015; Vahdany and Gerivani 2016). However, to the researcher's knowledge, studies carried out to assess undergraduate medial students' language needs in Turkey are very rare (Alagozlu 1994; Taşçı 2007; Yeniçeri 2008). For this reason, this study aims to explore language needs of undergraduate medical students enrolled in a consecutively running ESP course as part of their education at School of Medicine.

2. NEEDS ANALYSIS IN ESP

According to Hutchinson and Waters (1987) ESP was separated from English for general purposes, and originated for mainly two reasons in the late 1960s. Primarily, when the time and money invested for learning English was limited, it created a need for cost-effective courses with clearly defined goals. Secondarily, learners and their needs for learning were other factors accelerating the growth of ESP from pedagogical view-points. In this sense, ESP as not only a separate branch but also an approach to English language teaching, is based on needs analysis which is emphasized as its defining feature (Carter and Nunan 2001), especially in an era when resources are becoming smaller and also fewer, the demand for accountability in every aspect of life, including education, grows constantly (Long 2005). Besides, as the corner stone leading to a very focused course, needs analysis is also the key stage to determine which language skills are needed most by learners (Dudley-Evans and St John 1998). Furthermore, as needs analysis relates to learners' reasons for learning, it puts a line between general English courses and ESP courses (Hutchinson and Waters 1987). Therefore, the main motive for ESP practitioners and researchers has long been to focus on learners' needs and base the curricula on measurement of learners' needs. For this reason, ESP, especially in undergraduate level, needs to be associated with the specific discourse that learners need to function effectively when they perform their job-related tasks (Faraj 2015). Faraj further adds that as a fact-finding process, needs analysis ultimately help ESP practitioners and researchers determine educational goals, content to be covered, materials, and also teaching approaches to adopt in a specific context.

Beyond all these issues, what was asserted by Hutchinson and Waters (1987) clearly indicates the reason why needs analysis should be there inside ESP courses. For them, it is not the existence of a need, rather *awareness* of the need which has an impact upon what is acceptable as a reasonable content in the course, and on the positive side what potential can and needs to be exploited. For this reason, despite the fact that needs analysis appears on the surface, it is only a secondary consequence of being able to specify *why* learners need English. In other words, the nature of the need distinguishing it from any English course is *not the need itself, but the awareness of a need*. This awareness is the departure point for the researcher to conduct the current study.

3. METHODOLOGY AND RESEARCH PURPOSE

The current study set out to examine language needs of undergraduate medical students enrolled in a consecutively running ESP course in their faculty program. The analysis of learners' language needs was mainly based on their perceptions on four macro language skills; *listening, reading, speaking, and writing*. Thus, to gather data for this research concern, quantitative survey methodology was followed through a needs analysis form. As suggested by Nunan and Bailey (2009), the overall purpose of a survey methodology is to obtain a snapshot of the condition, especially when it is the most cost-effective and practical method to gather data from a large sample (McCawley 2009). Further details regarding the course itself and motivation lying behind the study, and technical issues such as the setting and participants, instrumentation, and data collection and analysis are provided in the following sub-sections.

3.1. Background to the consecutively running ESP course

Most Turkish universities put great emphasis on running ESP courses to enable their students to become competent, or at least familiar with language skills in their future career. The ESP course, which the 2nd and 3rd graders are currently enrolled in the school of medicine at a Turkish state university, which was founded 35 years ago, is also the reflection of the importance being attached to the ESP courses in the country. The course, which is extensive and compulsory, has been running for 25 years for second grade students, but it just started 8 years ago for the third grade students, possibly because to lengthen the time that the students are involved in studying ESP and also to intensify what they learn through the course. Besides, the course takes place for 35 weeks each year and has 70 hours per year (2 hours each week). In each grade, there are four groups named from A to D, and formed according to the results of a proficiency test which is conducted at the very beginning of the 2nd year. When this needs analysis study was conducted, the total number of students enrolled in the 2nd grade was 258, while the total number in 3rd grade was 265. All these students were assigned into four groups according to their language proficiency test scores.

Each and every year, in both 2nd and 3rd grades the course is staffed by four English language instructors who are appointed to the foreign languages department of the university and are also assigned to different faculties to tutor both EAP and ESP courses. In some cases, the instructors may volunteer to be staffed for the course, or they are staffed to tutor the course by the department chair. These instructors are not provided any administrational guidelines to run the course. There are also no predetermined program goals and objectives by the faculty management. All these issues are most probably closely linked to the fact that there has

never been a needs analysis neither as a requirement by the faculty management nor as a personal effort by the instructors running the course. For this reason, no one running the course so far has had any idea reading the language needs of the learners, and this was the drive for the researcher, who is also one of the instructors running the course, to conduct a needs analysis at least in her own groups and to obtain a snapshot of what the learners' likely language needs are.

3.2. Setting and participants

The setting for the research was the school of medicine at a Turkish state university. More specifically, the ESP course running consecutively both in the 2nd and 3rd grades was the actual setting within which the learners enrolled in the 2016-2017 cohort and having been placed in group A are the participants. The total number of participants in both groups was 88. In both grades the majority of the learners were females (n=57), while the rest were males (n=31). The age range in both groups was quite similar. Majority of the learners in the 2nd grade were mostly 20, and 21 in the 3rd grade. The demographic information items that were attached to the very beginning of the needs analysis form also included one more question regarding if the learners have ever studied or travelled abroad. It revealed that in both groups only a very small portion (7% in the 2nd grade; 2% in the 3rd grade) has either studied or travelled abroad. Furthermore, although no other data regarding their motivation, interest, and amount of time and effort that they invest in studying English was obtained, the insights that the researcher gained through her observations in both groups, as the course tutor, showed that they were diverse learner groups.

3.3. Instrumentation

For data collection, a needs analysis form which was previously designed by the researcher for another preliminary study was used. The design of the questionnaire was based on an earlier survey instrument used by Naruenatwatana and Vijchulata (2001) in their study of needs of medical students in the use of academic English. The needs analysis form consisted of two sections, the first of which asked for some basic personal data, while the second part included language skill areas. The questionnaire which had 21 items in its original version (Naruenatwatana and Vijchulata's study) was developed into a 26-item tool for the researcher's earlier preliminary study. The items in the form were put under four macro language skills, and were asked to be rated on a 4-point Likert scale ranging from *very essential to unessential*. To assure the validity of the data collection instrument, content and face validities were paid attention to. Firstly, for content validity, the items included in the original version used by Naruenatwatana and Vijchulata (2001) were critically analyzed to decide how representative they were for the language skills to be used by medical students while they engage in their profession. For this reason, some items from the original version of the questionnaire were excluded while some other new items were added into each macro skill. Apart from content validity, for face validity, the researcher looked at how valid the questionnaire appeared on the surface and made subjective judgments based on that.

Together with the researcher's own judgments upon the content and face validity of the instrument, expert opinion was also sought for the final version of the questionnaire throughout the earlier preliminary study. For this reason, a mini-piloting was employed. For this piloting, a medical doctor who was doing her specialization at the time of the

preliminary study, now a faculty member, responded to the form, and also commented on the representativeness of the items included. Upon the feedback elicited from the expert, the form, which was in English at the beginning, was translated into Turkish. This final version was used to collect data.

3.4. Data collection and analysis procedure

So as to collect data both from the 2nd and 3rd graders, group administration (Dörnyei 2003), which is the best way to administer the needs analysis and also to guarantee that the administration happened under homogeneous circumstances, was administered. Group administration also enabled the researcher to reach all the learners in both groups. Besides, it enabled the researcher to obtain immediate responses from the students to avoid any data loss. For this reason, when the learners in both groups were together for the course, the researcher informed them about the needs analysis form and the purpose in her mind, and requested them to respond to the form. Participation was left to their voluntariness, and they were also assured that their responses would be and would stay confidential, and would only be used for this study.

After the needs analysis was administered, the researcher sat out for data analysis. However, before the analysis, the needs analysis forms which had missing data, and also were responded only like 'unessential' or 'very essential' were disregarded mainly because they seemed to be paid no critical thinking to when responded. Therefore, when the preliminary review was done, the researcher went on to data analysis with a total number of 88 forms which were carefully responded to by the learners in both groups. For the analysis, descriptive statistics, such as mean and standard deviations, were calculated. Results gained through the analysis are presented in the following section.

4. FINDINGS AND DISCUSSION

As stated previously, the current study examines perceived language needs of the 2nd and 3rd grade undergraduate medical students enrolled in a consecutively running ESP course. Initially, the overall results revealed through the descriptive analysis of both grades' needs on four macro language skills, namely *listening, reading, speaking, and writing,* are presented in the figure below (see Figure 1).

As the figure shows for both grades *reading* is perceived to be the top essential language skill with a Mean value of 3.45 for the 2nd graders, and 3.51 for the 3rd graders. It is then followed by *speaking* (*M*= 3.33 for the 2nd graders and *M*=3.29 for the 3rd graders). Similarly, the language skill that both graders perceive to be essential next is *writing.* Its mean value in the 2nd graders is 3.19 and 3.29 in the 3rd graders. At this point, the data shows that although there is a slight difference between their perceptions with regard to speaking and writing, the 3rd graders are seen to perceive speaking and writing as equally essential (*M*=3.29 for both skills). When it comes to listening, as can clearly be seen, both graders regard it as the least essential language skill. As it can be understood from the mean values and also from the data display in the figure, in both groups, despite slight variations, the order that they perceive the four skills as essential is the same. In other words, in both grades, reading skills come first, and are followed by speaking, writing, and listening. Besides, the 3rd graders' perceptions regarding the essentiality of the language skills seem to be relatively higher which could suggest that as they become

closer to the profession, the degree that they perceive the need for being equipped with language skills appropriately and adequately gets higher.
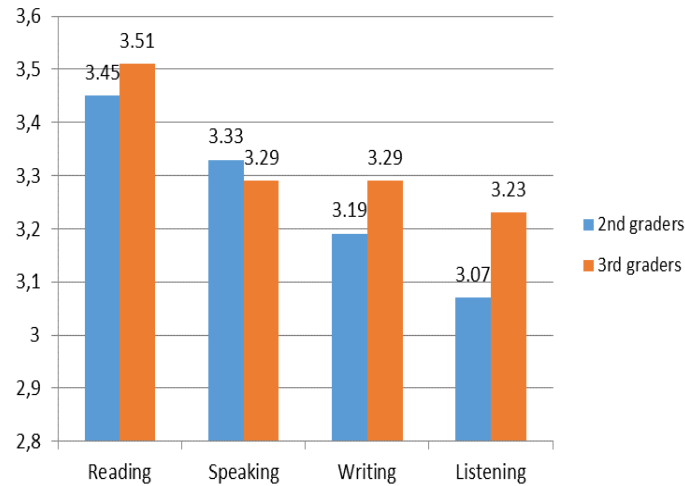

Figure 1 Overall mean values for four macro skills in both groups

The learners' perceptions regarding the essentiality of the skills are actually in some sort of conflict with some other studies (see Ayas and Kırkgöz 2014; Faraj 2015). For instance, in his study upon the role and importance of English in Iranian medical students' education, Faraj (2015) reports that learners regarded speaking and listening as the most important language skills compared to reading and writing which were seen as important only by the teachers and the dean in their program which Faraj linked their awareness regarding the profession.

Details regarding what micro skills those learners perceive as essential within each and every macro skill are dealt with in the following tables. Initially, descriptive values gained through the analysis of reading skills, as the top essential language need, are provided below (see Table 1).

Table 1 Reading skills needs

Language Skill Area	2nd graders		3rd graders	
Reading Skills	Mean	SD	Mean	SD
Reading medical textbooks	3.57	.63	3.60	.75
Reading medical journals	3.43	.67	3.51	.73
Reading medical reports	3.38	.76	3.48	.76
Reading clinical laboratory reports	3.34	.76	3.49	.78
Total	3.45	.58	3.51	.69

As the table shows, for both grades *reading medical textbooks* is perceived to be the top essential skill which is followed by *reading medical journals*. However, in the 2nd graders while *reading medical reports* is perceived to be more essential than *reading clinical*

laboratory reports, it is just the opposite in the 3rd grades. Then again, the perceptional change is quite minor, which could be attributed to the 3rd graders' getting closer to the profession, accordingly suggesting that they will need to work on clinical reports, thus need to read and understand them. In this sense, the slight variation could make sense. The emphasis that both groups consider reading the most essential language skill could suggest that they are aware of the need that their profession requires extensive reading both to equip themselves with knowledge and also keep their knowledge up-to-date and follow current changes and developments in the field. Despite the slight difference between the grades' perceptions, the results are in line with some other studies (see Alagözlü 1994; Taşçı 2007; Hwang 2011; Javid 2011; Vahdany and Gerivani 2016) conducted with undergraduate medical students with different contexts (e.g. Saudi Arabia, Iran, or Taiwan) but reported reading skills as the top priority for their participants. All these studies, reflecting a consensus upon the priority of reading skills could also suggest the significance universally attached to being literate in English as the lingua franca of the scientific world which is developed and strengthened through knowledge-sharing.

As for the learners' language needs in speaking skills, the analysis regarding each and every item within the macro skill area are presented in the table below (see Table 2).

Table 2 Speaking skills needs

Language Skill Area	2nd graders		3rd graders	
Speaking Skills	Mean	SD	Mean	SD
Carrying out general conversations (phone calls, interacting with hospital personnel etc.)	3.42	.89	3.39	.86
Participating in classroom discussions	2.69	.87	2.65	.97
Carrying out academic discussions	3.24	.91	3.28	.72
Presenting videos at seminars & conferences	3.20	.98	3.15	.92
Presenting papers at seminars & conferences	3.26	.99	3.30	.87
Participating in discussions at seminars & conferences	3.33	.85	3.13	.91
Giving oral instructions at seminars and surgeries	3.29	.89	3.22	.85
Giving instructions to patients	3.15	1.1	3.15	1.0
Asking about symptoms	3.48	.86	3.30	.96
Talking to foreign patients	3.76	.48	3.52	.66
Talking to foreign colleagues	3.76	.43	3.65	.60
Total	3.33	.52	3.29	.54

When the means are examined, *talking to foreign colleagues* and *patients* are seen to be perceived as the most essential skills in both grades. Furthermore, while the 2nd graders are seen to attach equal importance to both items, the 3rd graders are seen to perceive *talking to foreign patients* as a relatively less essential skill. Moreover, while the 2nd graders are seen to perceive *asking about symptoms* as another essential skill, the 3rd graders are seen to put emphasis on *carrying out general conversations* such as phone calls or interacting with hospital personnel. This could have been one of the reflections of the 3rd graders' program which requires them to fulfill a one-month internship either in an inland or outland hospital. And some of the 3rd graders are known to prefer to fulfill the internship abroad. For this reason, carrying out general conversations, as part of their social identity within their workplace, is and can understandably be perceived as a more

essential need. Although other items' mean values reveal that the learners tended to perceive their essentiality differently, both groups are seen to perceive *participating in classroom discussions* as the least essential skill. As the faculty coursework is in Turkish, the learners' perceptions regarding this item can make sense. The results are in line with some other studies conducted in Turkish context (see Taşçı 2007: Ayas and Kırkgöz 2014), and revealed that learners wanted to improve their speaking skills. However, the findings do also mismatch with some other studies (see Vandany and Gerivani 2016) reporting speaking skills as the least significant skill for medical students and even General Practitioners, possibly because the contextual factors which do not require them to actively and frequently speak English.

Besides, learners' perceptions regarding writing skills were also analyzed for each item within the macro skill area. The table below provides the results (see Table 3).

Table 3 Writing skills needs

Language Skill Area	2nd graders		3rd graders	
Writing skills	Mean	SD	Mean	SD
Writing research papers	3.55	.63	3.42	.69
Writing medical reports	3.52	.71	3.42	.72
Writing course assignments	3.12	.86	2.89	.91
Writing for practical purposes	3.12	.97	3.40	.72
(e.g. e-mail messages, letters or memos)				
Writing case histories	2.74	1.1	3.33	.79
Writing instructions/prescriptions to patients	3.07	.97	3.29	.97
Total	3.19	.59	3.29	.58

As the table shows, *writing research papers* and *medical reports* are the two skills perceived to be the most essential by the learners in both groups. This is in line with what Iravani and Saber (2013) and Faraj (2015) reported in their studies where the learners regarded wiring research papers and reports as the most challenging sub-skills. However, the 3rd graders are seen to perceive *writing for practical purposes* and *writing case histories* relatively more essential than how the 2nd graders perceive these two items. The motivation lying behind their perceptions can actually be expected as they are getting closer to the profession, and therefore, writing e-mail messages to colleagues for instance can be one of the most common daily tasks within the profession. Besides, writing case histories is among the most common tasks, and it can also be perceived essential as a result of their future career motivation. For instance, for those who want to pursue an academic career after graduation, being able to publish is a must. Hence, they need to be quite competent in writing. When the 2nd graders' perceptions are closely examined, they are seen to perceive *writing course assignments* and *writing for practical purposes* equally essential. Similarly, while writing for course assignments is perceived to be the least essential skill for 3rd graders, the least essential skill for the 2nd graders is seen to be writing case histories. All in all, the 3rd graders are observed to perceive the skills more essential while the 2nd graders' perceptions for the same issues are observed to be relatively lower.

Listening skills is found to be perceived as the least essential skill by both grades. Details regarding item-based analysis are provided below (see Table 4).

Table 4 Listening skills needs

Language Skill Area	2nd graders		3rd graders	
Listening skills	Mean	SD	Mean	SD
Listening to medical conversations	3.57	.74	3.67	.60
Listening to conversations on general topics	3.29	.92	3.43	.81
Listening to conference presentations	2.95	.88	3.24	.79
Listening to lectures	2.88	.89	2.96	.97
Listening to classroom presentations & discussions	2.64	.91	2.87	.91
Total	3.07	.99	3.23	.61

As the table shows, in both grades, *listening to the medical conversations* is perceived to be a priority (M=3.57 for 2nd graders and M=3.67 for 3rd graders). It is followed by *listening to the conversations in general topics* which is quite understandable as they may need to use English also for watching films, or listening to songs. *Listening to conference presentations (M=2.95/M=3.24) and lectures* are perceived to be moderately essential. This also makes quite a lot sense as the learners very scarcely present in international conferences throughout their undergraduate education. Even if they do, they are generally provided with translation and interpretation service in such organizations. As the mean values show, in both grades *listening to classroom presentations and discussions* is perceived the least as a need. This is also quite understandable considering that medium of instruction in the learners' undergraduate faculty program is Turkish. The results actually mismatch with some other studies finding out that listening is the second essential and important skill (see Hwang and Lin 2010; Hwang 2011; Faraj 2015). The case in the current study could have resulted from being relatively less exposed to English other than the classroom context mainly because English is not a second but a foreign language in Turkey. Therefore, as the learners are rarely exposed to English out of class, they, naturally, do not need to "listen" that much.

As seen, some sort of consensus and similarity were reported in the studies examining medical students', professionals' and also teachers', teaching in medical contexts, perceptions regarding the role, importance, and essentiality of English. However, variation is still evident indicating that needs, even in similar contexts, can differ.

5. CONCLUSION

Setting out to explore undergraduate medical students' perceived language needs from a consecutively running ESP course at a Turkish state university, this study showed that despite slight variations between the groups' perceived language needs, reading is perceived to be priority for the learners in both groups, and is followed by speaking, writing, and listening. With no doubt, no skill is superior to another skill, however, learners' needs should be considered when an ESP course is planned and performed. In this regard, needs analysis plays a critical role. For this reason, even when the level and age groups is disregarded, ESP courses could be more effective and can meet the learners' expectations more and better if they rely on the analysis of the learners' needs.

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