



## A Needs-Analysis of Psychology ESP Textbooks of Iranian Undergraduate and Graduate Students: Focus on Islamic Azad University-STB-A Mixed-Methods Study

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### Abstract

The current study examined the effect of implementing student-centered versus text-based approaches on the learning vocabulary of Iranian ESP university students of aviation. To meet the objective of the study, a cohort of 40 male ESP university students of aviation, signified as homogenous pre-intermediate learners chosen through the Oxford Placement Test (OPT), were selected from a pool of 60 EFL learners at the University of Shahid Sattari in Tehran, Iran. The participants were divided randomly into two groups: experimental group A (student-centered approach) and experimental group B (text-based approach), each comprising 20 students. The researchers conducted six sessions lasting 60 minutes each, during which English aviation vocabulary items were taught to the students given their respective approaches. The results of Analysis of Covariance,  $F(1, 37) = 9.50, p = 0.004$ , showed that the student-centered approach yielded a more pronounced effect on the learners' aviation vocabulary acquisition than the text-based approach. These findings are discussed concerning the previous research. The study concludes with pedagogical implications for EFL teachers, material developers, course designers, and language assessors.

**Keywords:** aviation students, aviation vocabulary, student-centered approach, text-based approach

### 1. Introduction

Generally, students in different fields need to pass technical English for satisfying their needs in both academic and professional settings. Since English is an international language, not only students need to learn it for general purposes, but also, they need to master technical English for not having problems with technical expressions of their field. Given this fact, English course books should be comprehensive and effective (Chemir & Kitila, 2022).

In this regard, Sobhanmanesh (2021) points out that English is the medium of instruction in higher education. Therefore, the requirements for specialized English teaching have developed. For example, Gillett (2014) noted that such specialized teaching can be called English for Specific Purposes (ESP) and English for Academic Purposes (EAP). Therefore, students learn the language and related language skills that they need to study in higher education (Chemir & Kitila, 2022).

ESP course is one branch of English teaching, but the focus in ESP is on particular features of language. These features are contained in a course book that is designed for students of different fields. It means that students of different fields need to know specialized features of English given their fields. ESP course books can provide the necessary knowledge of English and their purpose is to make students be able to utilize English in academic and professional contexts as well. This ability also assists them to have more chances for being hired (Rahman, 2015).

The purpose of the ESP course is to meet the needs of students who need to acquire a foreign language for their specific field of study. As a matter of fact, ESP courses aim to prepare students to use English in professional, academic or workplace contexts where they need to use English. In fact, in such courses, English is not acquired for its own sake or to achieve a comprehensive education, but the aim is to improve the language skills of ESP students in specific contexts (Basturkmen, 2010, as cited in Arifin et al., 2022). In Iran, too, students from different disciplines are required to take ESP courses.

There are two types of needs (Hutchinson & Waters, 1987): learning needs and target needs. Target needs refer to those needs which learners need in order to be able to communicate in the target situation. Therefore, learning needs are those that learners need to master in order to satisfy their needs. Target needs falls into three groups: lacks, wants and necessities. Necessities refer to the skills that learners need to master, lacks refer to the skills that learners have not mastered and wants refer to the skills that they are expected to learn.

Needs analysis should receive attention in both ESP and EAP as it is at the service of course designers to design a course with using the best methodologies and resources given needs of learners of each field. In other words, needs analysis is an essential factor for designing course books. With this regard, many scholars have focused on this issue (Zand-Moghadam et al., 2018). The issue of needs analysis backs to the 1960s when practitioners paid attention to particular needs of students of different fields (Richards, 2001). Today, needs analysis can be conducted not only for ESP course, but also for any academic courses in order to see the weakness and strength of them.

For getting the data given the needs of students, there are three stages for conducting that include planning, data collection, and entering the collected data into the analysis. The planning step has to do with the arrangement of the questions in relation to the students' needs that will be met in the questionnaire. Then the questionnaire needs to be distributed to intended participants. In the end, the data achieved from the questionnaire are analyzed, and then syllabus designers can make use of them (Syakur, et. al, 2020). Therefore, needs analysis is seen as the critical stage in designing any course book.

ESP courses stress the real employment of English in real working atmosphere. It could be said that the main difference between ESP and general language is that ESP is taught only with concentrating on real use of language in working setting. With this regard, ESP students should be able to satisfy their communicative needs either in spoken or written forms. Therefore, ESP textbooks should be

comprehensive and effective. The main point for getting such textbook is to do needs analysis (Li & Fu, 2021).

With this regard, the English course of universities should be given the particular needs of practical employment of English in different professional and working contexts. Before making any decision and changing the courses, a needs analysis is very crucial to gather required data from the all dimensions get involved. In fact, needs of learners play an important role in designing an effective course book. Therefore, it can be said that needs analysis should be done for textbooks in order to signify needs and remove weaknesses (Rahman, 2015).

Psychology as one of the academic majors has many expressions and vocabularies that students of psychology need to know in English. With this regard, different textbooks are designed for these students. Islamic Azad University like other university has specialized English textbooks for psychology students. But many of psychology students complain given their limited technical English. To the best of the researchers' knowledge, no empirical study has been carried out to analyze the needs of psychology textbooks for graduate and undergraduate students in Islamic Azad University. Thus, the researchers decided to conduct an empirical study to inspect it.

## **2. Literature Review**

### **2.1. English for Specific Purposes (ESP)**

ESP is regarded as a phenomenon grown out of some converging trends that three of them were taken in to account more. These trends include the demand (a) development for English suit particular needs of a profession, (b) expansions in the linguistic field and it refers to the change of attention from elaborating formal features of language to finding out the ways through which language is employed in real communication, which causes the need to strengthen English courses for particular groups of learners, and (c) psychology of learners that focuses on needs and interests of learners that has effect on their effectiveness and motivation of their learning (Pardayevna, 2021).

Traditionally, ESP has been divided into two broad categories, depending on the context in which it is delivered: (a) English for Academic Purposes (EAP), which includes pre-employment, simultaneous and post-employment courses; and (b) English for Professional Purposes (EOP), which is designed for study in a specific occupation, field of work or academic discipline. The pre-experience course eliminates any special work related to the real discipline or work, as the learners do not yet have the necessary familiarity with the content; the opportunity for special or combined work is presented during the study or in-service courses (Pardayevna, 2021).

In other section, ESP is divided into two parts of EAP and EOP given professional or disciple area in the following ways that include (a) EAP consists of English for Academic or Science and Technology (EST), English for Medical Purposes (EMP), English for Legal Purposes (ELP) and (b) EOP consists of English for professional purposes such as English for Business Purposes (EBP) and English for Vocational Purposes.

The origin of ESP and its expansion is closely related to interests of learners in different particular disciplines such as psychology English. Students in fact learn English for a particular purpose, indicated by studying subject matter, to obtain and expand appropriate knowledge and skills through the

English language. That is why English is not regarded as the major purpose in learning process, but rather it is regarded as a tool for its requirements (Pardayevna, 2021).

Needs analysis should be taken into account in both ESP and EAP since it assists the course designers to design a course with employing the best methodologies and resources according to the needs of learners of each field. It could be said that needs analysis is a crucial factor for designing course books. In this respect, many scholars have concentrated on this issue (Zand-Moghadam et al., 2018). The data of needs analysis backs to the 1960s when practitioners paid attention to particular needs of students of different fields (Richards, 2001). Nowadays, needs analysis can be conducted not only for ESP course, but also for any academic courses for seeing the weakness and strength of them.

## 2.2. Assessment in ESP

There are two main reasons for assessing any ESP learning process. Assessment could be used to provide constructive feedback to support learning and also to measure competence in a quantifiable way. Psychology students can use assessment to motivate themselves to learn languages. This is consistent with what is perceived as one of the main reasons for using language assessment in a pedagogical setting, namely to encourage learners to engage meaningfully with the material that is central to the teaching aims of a given course. In the case of technical language and ESP, the material is linked to the curriculum objectives. It is directly derived from the learners' field of interest, thus increasing the chances of intrinsic motivation for learning Cohen (1994).

Assessment can also be effective for teachers. By receiving the results, teachers can see how well learners have done on the material being assessed. They can also check for any discrepancies between actual performance and expectations. This information can show the student's level of mastery, the instructor's ability to convey the content, the quality of the writing, and so on. Such feedback could be used to suggest ways of teaching, reviewing and reinforcing weak points. Given that technical English is more complicated for ESP learners and teachers, and that teachers should address technical content as well as pure language objectives, an inclusive design of assessment should perhaps follow Cheng's (2017) distinction between assessment of learning and assessment for learning.

## 2.3. Psychology

Psychology is one of the popular fields and each year many Iranian students choose this field. Psychology is the study of mind and human behavior. Since there are many foreign practitioners and scholars who are active in this field, many English psychology textbooks have been translated to Persian. Furthermore, this field like many other academic fields has academic books that are teaching in the university. In fact, psychology students have general English and specific language book. In technical English, they learn technical terms of psychology book along with some related exercises. They include reading passages and writing exercises. The point is that these course books should be comprehensive enough to satisfy the technical needs of students within the course and after graduation, they should have comprehensive knowledge of English.

## 2.4. Needs Analysis

The term needs analysis in different contexts of language instruction has mainly meant determining the dimensions of language the specific groups of learners need to know. It is improbable for different reasons, one of which is lack of time to teach all dimensions of each language and some selection need to take place. In this regard, needs analysis is an essential step in process of designing a

course. By conducting, needs analysis, the needs of learners are being identified and a course can be designed based on the true needs of learners. Hutchinson and Waters (1987) define needs as wants, necessities and lacks. Brindley (1989) also noted that needs can be viewed as the gap exists between true needs of learners and what they are learning.

In his study, Alsamadani (2017) conducted a needs analysis in ESP textbook of Saudi engineering students. After he selected the participants, he asked them to answer a needs analysis questionnaire that was designed for needs analysis. He concluded that the data analysis provided useful recommendations for ESP teachers to enhance ability of their students. Moreover, he showed that the participants mainly had problems with speaking skill.

Similarly, in their study, Azarsarv et al. (2020) did a needs analysis of deck engineering ESP students. They employed questionnaire for collecting the required data. They came to this conclusion that deck cadets stressed on boosting of their specialized language skills since it makes them able to perform better.

In other study, Mostafavi et al. (2021) conducted a study and they focused on ESP needs of Engineering Students. They employed questionnaire and interview for collecting the required data. The descriptive analysis showed that the importance of learner needs related to ESP learning and those related to the target situation of use were revealed by the engineering students' responses to the needs analysis questionnaire.

Similarly, Arroyyani and Widiyati (2022) conducted a needs analysis on ESP course book of public health students. They used questionnaire and interview for collecting the required data. The analysis indicated that students were comfortable with reading skill but they believed that writing is viewed as an important skill that needs to be taken into account.

In the same vein, in their study, Jubhari and Rosmiaty (2022) did a needs analysis in ESP for nursing students. They came to this conclusion that students of this field need to master all four language skills and they want to know enough technical terms in order to satisfy their needs in a professional context.

In line with previous studies, in their study, Chemir and Kitila (2022) conducted a needs analysis for academic purposes in Ethiopian higher education institutions. They employed survey questionnaire and interview for their study. They concluded that students had integrative and instrumental orientations for mastering English. They participants stated that they learn English because it is useful in finding a good occupation in the future or they want to study in a foreign country. Some others stated that they want to learn English because they like culture and the language.

Based on the studies that the researchers read and review of the related literature, however many empirical studies have been conducted on needs analysis of ESP course, yet as far as the researchers are concerned, almost no empirical study has been done on needs analysis of psychology students of Islamic Azad University. Therefore, the objective of this study is to fill this gap in the literature.

### 3. Research Questions

The researchers conducted a needs analysis of psychology ESP textbooks among Iranian undergraduate and graduate students with a focus on Islamic Azad University-South Tehran Branch (STB). Specifically, it sought to answer the following research questions:

1. What are ESP textbook needs of graduated and undergraduate students of psychology in terms of vocabulary, grammar, speaking, writing, reading, and listening?
2. What are the attitudes of ESP teachers of psychology toward this course?

## 4. Method

### 4.1. Research Design

The researchers used a mixed-methods approach, which is a procedure for collecting, analyzing, and mixing or integrating both quantitative and qualitative data at some stage of the research process within a single study (Creswell, 2005). This study started on December 15, 2023 and finished on January 26, 2024 and the researchers selected the participants through convenience sampling method. The rationale for mixing both types of data was that neither quantitative nor qualitative methods were sufficient by themselves to capture the trends and details of needs-analysis of psychology ESP textbooks. The investigators used both quantitative and qualitative strands were used together to complement each other and provide a more complete picture of the research problem (Johnson & Turner, 2003; Tashakkori & Teddlie, 1998). In fact, the present study was the explanatory sequential design which started with quantitative data collection and analysis and then followed up with qualitative data collection and analysis, which lead to interpretation. This helped determine what quantitative results needed further explanation (Creswell & Creswell, 2018). In the quantitative phase, the researchers aimed to find out the ESP textbook needs of graduated and undergraduate students using a questionnaire and survey design. And afterwards, in the qualitative phase, the current investigators examined the attitudes of ESP teachers of psychology towards their course. The emphasis was more on quantitative phase, and finally, the mixing of these two phases occurred in the interpretation or discussion section of the study.

### 4.2. Participants

To fulfill the objective of this study, the researchers selected 38 B.A and M.A. psychology students who were studying at Islamic Azad University, South branch. The participants included both male and female. Twenty-two of the participants were studying psychology at B.A level and 16 of them were studying psychology at M.A level. The researchers considered B.A students as undergraduate and M.A students as graduate students. The participants were at age ranged from 19 to 27. Moreover, the researchers selected five psychology ESP instructors to interview with them. Three of them were males and they were teaching at Islamic Azad University, South Branch and two of them were females and they were teaching at Payam Nour University.

### 4.3. Instruments

For collecting the required data, the researchers utilized (a) needs analysis questionnaire and (b) semi-structured interview. They also focused on the specialized English course book i.e., English for Students of Psychology (humanities) developed by SAMT, in which the students were supposed to study it at Islamic Azad University.

#### 4.3.1. Adapted Needs Analysis Questionnaire

For signifying the needs of psychology students about specialized English textbooks, needs analysis questionnaire was administered. This questionnaire included of 22 items referring to the seven

main domains (objectives of learning, language learning skills/sub-skills, syllabus, materials, feature of teaching/learning, administration, and assessment system). It is worth to mention here that this questionnaire was developed by Mostafavi et al. (2021). The Cronbach's alpha reliability index was measured .79 in the pilot study done with 20 ESP teachers who shared the same characteristics with the main sample of this study. For ease of data collection, the researchers used electronic version of it and sent it through iGap messenger to the intended participants. Three experienced EFL university instructors read the questionnaire and validated its content.

#### **4.3.2. Semi-Structured Interview**

The second instrument of this study was a semi-structured open-ended interview for ESP teachers. The researchers selected five ESP teachers to interview with them. Two of them were males and they were teaching at Islamic Azad University, South Branch and one of them was female and she was teaching at Payam Nour University. The focus of this interview was to find the current situation needs as well as target situation needs. The questions were in line with the objective of questionnaire. In this interview, the researchers employed open-ended questions. At first, general background data about the interviewees were asked such as their gender, age and the subject that they were teaching. Then, the researchers asked their perception given the significance of English for psychology students. Next, they asked them about the most crucial skills that students have to carry out in their studies. The significance of technical terminology was discussed. Finally, the researchers asked them what are their comments and recommendation given psychology ESP course. During the interview, the researchers recorded their voice and they translated the questions if it is necessary. Meanwhile, the validity of interview results was done by the member checking and the reviewing and resolving disconfirming evidence.

#### **4.4. Procedure**

The objective of this study was to conduct a needs analysis of psychology ESP textbook of Islamic Azad University, South Tehran Branch. In fact, the researchers focused on graduate and undergraduate needs of psychology ESP students. To this aim, the researchers selected 38 B.A and M.A. psychology students who were studying at Islamic Azad University, South branch. The participants included both male and female. 22 of the participants were studying psychology at B.A level and 16 of them were studying psychology at M.A. level. The researchers considered B.A students as undergraduate and they regarded M.A students as graduate students.

The researchers found two groups of psychology students and sent the needs analysis questionnaire as link to these groups through iGap messenger. They recorded their voices and explained in Persian to avoid any misconception. Furthermore, the researchers selected five psychology ESP instructors to interview with them. Two of them were male and they were teaching at Islamic Azad University, South Branch and one of them was female and she was teaching at Payam Nour University. The researchers interviewed with ESP instructors and they recorded their voices for doing analysis.

#### **4.5. Statistical Analysis**

In this study, the researchers dealt with two types of data analysis including quantitative and qualitative. The quantitative raw data was entered into SPSS (version .26) to derive tables and figures using both frequencies and percentages. In addition, content analysis was used to analyze the qualitative

data, and as mentioned earlier in this paper, the validity of interview findings was achieved through the member checking and the reviewing and resolving disconfirming evidence.

## 5. Results

The purpose of the current study was to perform the needs-analysis of psychology ESP textbooks of Iranian undergraduate and graduate students. This section presents the descriptive and test statistics in tables and graphs. In order to fulfill the purpose of the present study, the following research questions were raised by the current researchers:

At the beginning of the questionnaire, it was important to ask the students about their purpose to learn technical English. According to the results represented in Table 1, the results reflect that majority (23 / 38, 60.5%) of the ESP student participants stated that their purpose of learning technical English is both “to study abroad” and “to pass the course-specific exams” (23 / 38, 60.5%), followed by the purpose “to make progress in career” (18 / 38, 47.4%), the purpose “to use it as a means of effective communication in domain-specific contexts such as meetings and conferences” (14 / 38, 36.8%), the purpose “to improve in terms of social statuses” (12 / 38, 31.6%), the purpose “to effectively deal with modern technology” (10 / 38, 26.6%), the purpose “to make progress in post-graduate education” (8 / 38, 21.1%), and then the need “to make progress in post-graduate education” (6 / 38, 15.8%) as the weakest purpose mentioned. Moreover, it is quite interesting that none of the students chose the aim “to find a field-specific job.”

**Table 1**

*Learning Purpose of ESP Graduate and Undergraduate Students of Psychology (N = 38)*

Item	Frequency (F)	Percentage (%)
a. To use it as a means of effective communication in domain-specific contexts such as meetings and conferences	14	36.8%
b. To find a field-specific job	0	0.0%
c. To make progress in career	18	47.4%
d. To study abroad	23	60.5%
e. To pass the course-specific exams	23	60.5%
f. To make progress in post-graduate education	8	21.1%
g. To effectively deal with modern technology	10	26.3%
h. To make use of online domain-specific resources	6	15.8%
i. To improve in terms of social statuses	12	31.6%

The purpose of the first research question of this study was to investigate the ESP textbook needs of graduate and undergraduate students of psychology in terms of vocabulary. To this end, the frequency and percentage for the responses of 38 graduate and undergraduate psychology students to the vocabulary part of the Textbook Needs Analysis Questionnaire were computed and reported in Table 2. Since the students were allowed to choose more than one single item, the sum of the frequencies would be more than the total number of respondents (38; 100.0%).

As shown in Table 2, the results show that the majority (30 / 38, 78.9%) of ESP students of psychology expect their textbook to prepare them “to learn general English vocabulary which collocate with technical words”. This need is followed by the need “to know English equivalents of more frequent field-specific Persian words” (22 / 38, 57.9%), the need “to expand my engineering terminology repertoire” (20 / 38, 52.6%), the need “to gain an active knowledge of technical vocabulary use

(acknowledge which not only facilitate vocabulary learning and retention but also allows students properly use context- relevant words in their writings and utterances” (11 / 38, 28.9%), and then the need “to know Persian equivalents of more frequent field-specific English words” (5 / 38, 13.2%) as the least need recognized.

**Table 2**

*ESP Textbook Needs of Graduate and Undergraduate Students of Psychology in terms of Vocabulary (N = 38)*

Item	Frequency (F)	Percentage (%)
a. To know English equivalents of more frequent field-specific Persian words	22	57.9%
b. To know Persian equivalents of more frequent field-specific English words	5	13.2%
c. To expand my engineering terminology repertoire	20	52.6%
d. To learn general English vocabulary which collocate with technical words	30	78.9%
e. To gain an active knowledge of technical vocabulary use (acknowledge which not only facilitate vocabulary learning and retention but also allows students properly use context- relevant words in their writings and utterances	11	28.9%

Table 3 summarizes the frequency and percentage for the responses of 38 graduate and undergraduate psychology students to the grammar part of the Textbook Needs Analysis Questionnaire. As represented in Table 3, the results suggest that a large proportion of the participants (28 / 38, 73.7%) expect their textbook to prepare them “to be familiar with widely-used structures to not only comprehend written/oral field-specific productions but also to maintain their fluency while interacting with members of English-language field-specific contexts.” This main recognized need is followed by the need “to have a good mastery of English forms and structure to fully comprehend field-specific productions and, at the same time, interact with others fluently and accurately” (26 / 38, 68.4%), and then the need “to activate the basic grammar of English so as to comprehend field- specific texts and utterances” (12 / 38, 31.6%) as the least preferred need.

**Table 3**

*ESP Textbook Needs of Graduate and Undergraduate Students of Psychology in terms of Grammar (N = 38)*

Item	Frequency (F)	Percentage (%)
a. To activate the basic grammar of English so as to comprehend field- specific texts and utterances	12	31.6%
b. To be familiar with widely-used structures to not only comprehend written/oral field-specific productions but also to maintain their fluency while interacting with members of English-language field-specific contexts	28	73.7%
c. To have a good mastery of English forms and structure to fully comprehend field-specific productions and, at the same time, interact with others fluently and accurately	26	68.4%

In addition, Table 4 contains frequency and percentage for the responses of 38 graduate and undergraduate psychology students to the speaking part of the Textbook Needs Analysis Questionnaire.

As seen in Table 4, the results indicate that the majority (29 / 38, 76.3%) of ESP students of psychology expect their textbook to enable them “to ask for clarification on difficult field-specific concepts in international academic context.” This need is followed by the need “to give foreign customers a brief account of the available engineering services” (23 / 38, 60.5%), the need “To effectively communicate with others in international academic settings (e.g., addressing field- specific speeches in meetings and conferences)” (18 / 38, 47.4%), the need “To explain field-specific processes, developments, materials, instruments, and measurements during inspections and external audits” (15 / 38, 39.5%), the need “To effectively manage working meetings with foreign customers” (15 / 38, 39.5%), the need “To pronounce the names of different field-specific tools, materials, and equipment accurately” (6 / 38, 15.8%), and then the need “to effectively participate in class activities throughout post-graduate education abroad” (3 / 38, 7.9%) as the weakest need detected.

**Table 4**

*ESP Textbook Needs of Graduate and Undergraduate Students of Psychology in terms of Speaking Skill*  
(N = 38)

Item	Frequency (F)	Percentage (%)
a. To pronounce the names of different field-specific tools, materials, and equipment accurately	6	15.8%
b. To give foreign customers a brief account of the available engineering services	23	60.5%
c. To explain field-specific processes, developments, materials, instruments, and measurements during inspections and external audits	15	39.5%
d. To ask for clarification on difficult field-specific concepts in international academic context	29	76.3%
e. To effectively communicate with others in international academic settings (e.g., addressing field- specific speeches in meetings and conferences)	18	47.4%
f. To effectively manage working meetings with foreign customers	15	39.5%
g. To effectively participate in class activities throughout post-graduate education abroad	3	7.9%

As displayed in Table 5, the results of writing skill revealed that a majority of the participants (24 / 38, 63.2%) expect their textbook to prepare them “to write field-specific reports such as a report on the installation of an engineering equipment.” The results indicate that this main found need is followed by the need “To effectively deal with field- specific correspondence (electronic and printed) in my future career” (18 / 38, 47.4%), the need “to fill in field-specific application forms” (16 / 38, 42.1%), the need “To fill in field-specific bills and receipts” (15 / 39.5%), the need “to write complaints about the quality of tools and services in future career” (7 / 18.4%), the need “to take note while reading field- specific documents” (6 / 15.8%), and then both the need “to take note while reading field- specific documents” (4 / 10.5%) and the need “To take notes while listening in class or field-specific contexts (meetings and conferences)” (4 / 10.5%) as the least selected needs. However, no participant selected the need “To compose an order to subordinate in future career” in terms of writing skill to be worked on their ESP textbook.

**Table 5**

*ESP Textbook Needs of Graduate and Undergraduate Students of Psychology in terms of Writing Skill*  
(*N* = 38)

Item	Frequency ( <i>F</i> )	Percentage (%)
a. To write field-specific reports such as a report on the installation of an engineering equipment	24	63.2%
b. To effectively deal with field- specific correspondence (electronic and printed) in my future career	18	47.4%
c. To fill in field-specific application forms	16	42.1%
d. To write detailed curriculum vitiates (CVs)	13	34.2%
e. To fill in field-specific bills and receipts	15	39.5%
f. To take note while reading field- specific documents	4	10.5%
g. To take notes while listening in class or field-specific contexts (meetings and conferences)	4	10.5%
h. To compose an order to subordinate in future career	0	0.0%
i. To write complaints about the quality of tools and services in future career	7	18.4%
j. To write scientific papers and manuscripts	12	31.6%
k. To compose field-relevant speeches	6	15.8%

According to the results reported in Table 6, the results of reading skill showed that most (29 / 38, 76.3%) of the ESP student participants unanimously want their textbook to enable them “To comprehend the field specific occupational documents, such as official deeds, reports, memos, correspondence, advertisement, booklets, and circulars, etc.” This need is followed by the need “to comprehend field-specific academic documents such as scientific papers, journals, online textbooks, etc.” (29 / 38, 76.3%), the need “to comprehend written instructions on how to use field- specific tools, materials, and equipment” (25 / 38, 65.8%), the need “to comprehend the instructional content of textbooks and pamphlets originally developed in English” (12 / 38, 31.6%), and then the need “to read about other engineering specialization” (3 / 38, 7.9%) as the weakest need identified.

**Table 6**

*ESP Textbook Needs of Graduate and Undergraduate Students of Psychology in terms of Reading Skill*  
(*N* = 38)

Item	Frequency ( <i>F</i> )	Percentage (%)
a. To comprehend field-specific academic documents such as scientific papers, journals, online textbooks, etc.	29	76.3%
b. To comprehend the field specific occupational documents, such as official deeds, reports, memos, correspondence, advertisement, booklets, and circulars, etc.	32	84.2%
c. To comprehend written instructions on how to use field- specific tools, materials, and equipment	25	65.8%
d. To comprehend the instructional content of textbooks and pamphlets originally developed in English	12	31.6%
e. To read about other engineering specialization	3	7.9%

As appear in Table 7, the results of listening skill revealed that most of the participants (31 / 38, 81.6%) expect their textbook to prepare them “To comprehend the utterance of colleagues about the details of engineering works (even those articulated in Persian but included English technical vocabulary items).” The results suggest that this main diagnosed need is followed by the need “To comprehend the utterance of English language orators and lecturer in field-specific contexts (meetings and conferences)” (28 / 73.74%), the need “To comprehend audio/video recorded instructions on how to use field-specific tools, materials, and equipment” (13 / 38, 34.2%), the need “To fill in field-specific bills and receipts” (9 / 23.7%), and then the need “To comprehend oral field-specific reports (even those articulated in Persian but included English technical vocabulary items)” (5 / 38, 13.2%) as the weakest listening skill need preferred.

Moreover, in order to explore the attitudes of ESP teachers of psychology towards their course, the researchers interviewed with five psychology teachers. During the interview, the researchers recorded their voices in order to analyze them and extract the main points.

**Table 7**

*ESP Textbook Needs of Graduate and Undergraduate Students of Psychology in terms of Listening Skill*  
(*N* = 38)

Item	Frequency ( <i>F</i> )	Percentage (%)
a. To comprehend the utterance of foreign engineers in working meetings	9	23.7%
b. To comprehend the utterance of English language orators and lecturer in field-specific contexts (meetings and conferences)	28	73.7%
c. To comprehend the utterance of colleagues about the details of engineering works (even those articulated in Persian but included English technical vocabulary items)	31	81.6%
d. To comprehend audio/video recorded instructions on how to use field-specific tools, materials, and equipment	13	34.2%
e. To comprehend oral field-specific reports (even those articulated in Persian but included English technical vocabulary items)	5	13.2%

The researchers also derived the main themes for providing a complete answer to the last research question. After analyzing the interview data from five verbatim transcripts, 94 significant statements were highlighted. Some instances of such statements along with their formulated meanings are presented in Table 8. In fact, each statement was read carefully to derive the intended meaning concepts. For example, Table 8 indicates some statements built by one of the psychology ESP teachers as interviewees and she stated that “I think mainly university teachers and also textbooks focus on technical vocabulary while, it is better to focus on other language skills such as writing and listening”. The other ESP teacher said that “I think it is better teachers who teach English to psychology students have enough knowledge of this field”. One other ESP teacher stated that “in my opinion, in today’s world, learning English is important to anyone and psychology students need to know English like other fields”.

**Table 8**

*Selected Examples of Highlighted Statements with their Formulated Meanings (ESP Psychology Students' Attitude)*

Significant Statement	Formulated Meaning
1) I think mainly university teachers and also textbooks focus on technical vocabulary while, it is better to focus on other language skills such as writing and listening	I think it is better teachers focus on all language skills.
2) I think it is better teachers who teach English to psychology students have enough knowledge of this field.	I think English teachers should have psychology literacy, too.
3) in my opinion, in today's world, learning English is important to anyone and psychology students need to know English like other fields.	In my opinion, learning English is Essential for psychology students.

For getting the final themes, the researchers evaluated the formulated meanings pondering over them. The purpose is that to get at larger categories distinguishing the main problems. For example, in Table 9, from the formulated meaning "I think it is better teachers focus on all language skills", "developing all language skills" was derived. In the other instance, as Table 9 shows "I think English teachers should have psychology literacy, too", the theme "being expert at psychology field" was extracted.

**Table 9**

*Example of Four Theme Clusters with their Associated Formulated Meanings (ESP Psychology Students' Attitude)*

Formulated Meaning	Theme Cluster
1) I think it is better teachers focus on all language skills.	Developing all language skills
2) I think English teachers should have psychology literacy, too.	Being expert at psychology field
3) In my opinion, learning English is essential for psychology students.	The importance of learning English for psychology students

### **A. Developing all language skills**

The results of interview indicated that psychology ESP teachers believed that ESP teachers should focus on developing all language skills of students. They believed that because of the syllabus, they had to focus on presenting a list of vocabulary and also reading text, and productive skills of learners are neglected.

### **B. Being expert at psychology field**

One ESP teacher stated that I think it is better English teachers who teach to psychology students, having psychology knowledge. Since in some reading text and technical psychological words, there is need to more psychology knowledge to teach them to students.

### **C. The importance of learning English for psychology students**

Two ESP teachers stated that these days learning English is very important for students of all fields. Psychology students like other students should master English not only in general but also at technical level. These days, many articles of psychology are being published in English. Therefore, they need to know English to update their knowledge.

## 6. Discussion

The purpose of the current study was to conduct a needs analysis of psychology ESP textbook of Islamic Azad University, South Tehran Branch. In fact, the researchers focused on graduate and undergraduate needs of psychology ESP students. The results showed that some of the ESP students regarded their textbook ineffective especially in developing their productive skills. In addition, teachers stated that textbooks should be prepared in such way to develop productive skills of students as well. Also, they believed that it is better English teacher of psychology ESP students has psychology knowledge.

These results align with a separate study done by Alsamadani (2017) which uncovered that the participants mainly had problems with speaking skill. In the current study, it was proved that students had problems with productive skills since their teacher mainly focused on grammar and vocabulary.

In the same vein, Azarsarv et al. (2020) conducted a needs analysis of deck engineering ESP students. They utilized questionnaire for collecting the required data. They concluded that deck cadets stressed on boosting of their specialized language skills since it makes them able to perform better.

These findings are also compatible with that of Mostafavi et al. (2021), who found that the responses given by the engineering students to the needs analysis questionnaire shed light on the importance of needs of learners related to ESP learning and those related to the target situation of use.

In line with the findings of this study, Chemir and Kitila (2022) did a needs analysis for academic purpose in Ethiopian higher education institutions. They employed survey questionnaire and interview for their study. They came to this conclusion that students had integrative and instrumental orientations for mastering English. The participants stated that they learn English because it is useful in finding a good occupation in the future or they want to study in a foreign country.

The results corroborate the previous research carried out by Arroyyani and Widiyati (2022). They did a needs analysis on ESP course book of public health students. They utilized questionnaire and interview for collecting the required data. Their findings showed that students were comfortable with reading skill but they believed that writing is viewed as an important skill that needs to be taken into account. Their results were in line with the outcomes of this study.

The present study also can take support from Jubhari and Rosmiaty's (2022) study in which they found that students of this field need to master all four language skills and they want to know enough technical terms in order to satisfy their needs in a professional context.

## 7. Conclusions and Implications

With regard to the ESP textbook needs of undergraduate and postgraduate psychology students in terms of vocabulary, it was concluded that their purpose for learning technical English was both 'to study abroad' and 'to pass the course-specific exams', followed by the purpose 'to progress in their career' and the purpose 'to use it as a means of communicating effectively in domain-specific contexts such as meetings and conferences'. The majority of ESP psychology students expected their textbook to prepare them to 'learn general English vocabulary collocated with technical words'.

Concerning the grammar, it was concluded that undergraduate and postgraduate psychology students expect their textbook to prepare them "to be familiar with widely used structures in order to not only comprehend written/oral field-specific productions, but also to maintain their fluency while

interacting with members of English-speaking field-specific contexts". This main recognized need is followed by the need "to have a good command of English forms and structures in order to fully comprehend field-specific productions and at the same time to interact with others fluently and accurately".

The next conclusion, related to the speaking skills, was that the majority of ESP psychology students expect their textbook to enable them to "ask for clarification on difficult field-specific concepts in an international academic context". In terms of the writing skills, the researchers came to the conclusion that undergraduate and postgraduate psychology students expect their textbook to prepare them to "write field-specific reports, such as a report on the installation of psychology equipment". The results show that this main identified need is followed by the need to 'deal effectively with field-specific correspondence (electronic and printed) in my future career'.

Regarding the reading skill, it was approved that undergraduate and postgraduate psychology students unanimously want their textbook to enable them "To comprehend the field specific occupational documents, such as official deeds, reports, memos, correspondence, advertisement, booklets, and circulars, etc." This need is followed by the need "to comprehend field-specific academic documents such as scientific papers, journals, online textbooks, etc."

For the listening skills, the main conclusion related to the fact that it was concluded that expected their textbook to prepare them to "comprehend the utterances of colleagues about the details of psychology works (including those articulated in Persian but containing English technical vocabulary)". The results suggest that this main diagnosed need is followed by the need "To understand the utterances of English-speaking speakers and lecturers in field-specific contexts (meetings and conferences)".

Finally, in relation to the last research question which explored the attitudes of psychology ESP teachers towards their course, the researchers interviewed five psychology ESP teachers. They believed that psychology ESP textbooks should be designed in such a way as to develop all the language skills of the students. Moreover, they believed that it is better for psychology ESP teachers to have psychology knowledge.

In summary, the participants' needs were very diverse. They were very keen to use technical English as a channel of communication throughout their learning/working lives. Such interests are because they want to master all language skills and focusing on just one component such as vocabulary is not enough. In fact, they want to have good productive and receptive skills. The learners' need for communication was also reflected in the stakeholders' choices for communication-based learning needs, such as the need for a task-based, multi-skilled communicative curriculum and to be involved in an interactional way of doing tasks that needs collaboration.

The identification of the learning needs of Iranian psychology students can help psychology ESP teachers to use appropriate teaching methods to meet the real needs of their students. Moreover, psychology students can better realize the ESP-based tasks and duties they will soon have to perform by knowing the target situation needs expressed by ESP teachers. Furthermore, by including more communicative materials/tasks in ESP syllabuses, syllabus designers could use the findings to reflect the genuine concern for effective communication. Finally, the findings can be used to make better pedagogical decisions by the authorities responsible for the undergraduate and graduate curriculum in Iran.

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## Authors' Contributions

All authors have conducted the study, collected data, analyzed and interpreted the data, and written up the manuscript.

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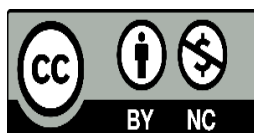
## Competing Interests

The authors declare that there is no conflict of interest.

## References

- Alsamadani, H. A. (2017). Needs analysis in ESP context: Saudi engineering students as a case study. *Advances in Language and Literary Studies*, 8(6), 58–68. <https://doi.org/10.7575/aial.v.8n.6p.58>
- Arifin, M., Norain, S., & Ridwan, B. (2022). ESP course design: the needs analysis on English for tourism book for travel business department of eleventh grade students at Smkn 1 Tarakan. *Technium Education and Humanities* 2(2), 1–7. <https://doi.org/10.47577/teh.v2i2.6968>
- Arroyyani, R., Widiyati, D. N., & Maryani, M. (2022). A needs analysis of ESP for public health students. *Esteem Journal of English Education Study Programme*, 5(2), 161–171. <https://doi.org/10.31851/esteem.v5i2.8535>
- Azarsarv, M., Maftoon, P., & Rashtchi, M. (2020). Importance of the needs analysis of deck engineering ESP students: Developing a needs analysis questionnaire through factor analysis. *Journal Paper*, 7(5), 137–151. <https://www.redalyc.org/pdf/2870/287030196006.pdf>
- Basturkmen, H. (2010). *Developing courses in English for specific purposes*. Palgrave Macmillan. <https://doi.org/10.1057/9780230290518>
- Chemir, S., & Kitila, T. (2022). Learners' needs analysis for English for academic purposes in Ethiopian higher education institutions: The case of Wachemo University freshman students. *Cogent Education*, 9(1), 1–22. <https://doi.org/10.1080/2331186X.2022.2026190>
- Cheng, L. (2017). *Assessment in the language classroom: Teachers supporting student learning*. Palgrave Macmillan.
- Cohen, A. D. (1994). *Assessing language ability in the classroom* (2nd ed.). Heinle & Heinle Publishers.
- Creswell, J. W. (2005, May). Mixed methods. Workshop hosted by the Veterans Affairs Ann Arbor Health Care System, Center for Practice Management and Outcomes research, Ann Arbor, MI.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage.
- Gillett, A. J. (2014). *EAP and student motivation*. Oxford University Press.
- Hutchinson, T., & Waters, A. (1987). *English for specific purposes: A learning centered approach*. Cambridge University Press.

- Johnson, R. B., & Turner, L. A. (2003). Data collection strategies in mixed methods research. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 297–319). Sage.
- Jubhari, Y., Rosmiaty, R., & Nurliah, N. (2022). Needs analysis in English for specific purposes (ESP) for nursing students. *Education, Language and Culture*, 2(1), 80–86. <https://doi.org/10.56314/edulec.v2i1.31>
- Li, X., & Fu, H. (2021). Needs analysis on ESP course for business and engineering students in a Chinese local university. *Creative Education*, 12(6), 1387-1396. <https://doi.org/10.4236/ce.2021.126105>
- Mostafavi, S., Mohseni, A., & Abbasian, G. R. (2021). A learning-centered analysis of the ESP needs of engineering students. *Journal of Language and Translation*, 11(3), 151–178. <https://doi.org/10.30495/tlt.2021.683484>
- Munby, J. (1978). *Communicative syllabus design: A sociolinguistic model for defining the content of purpose-specific language programs*. Cambridge University Press.
- Nation, P. (2000). *Designing and improving a language course*. Open Access Te Herenga Waka-Victoria University of Wellington. *Journal contribution*. <https://doi.org/10.26686/wgtn.12560360.v1>
- Pardayevna, K. N., Muxtorjonovich, R. S., Voxidovich, A., & Omina, M. (2021). ESP (English for Specific Purpose) teaching process, methods, assessment and issues. *Journal of Contemporary Issues in Business and Government*, 27(1), 192–202. <https://api.semanticscholar.org/CorpusID:231798016>
- Rahman, M. (2015). English for specific purposes (ESP): A holistic review. *Universal Journal of Educational Research*, 3(1), 24–31. <https://doi.org/10.13189/ujer.2015.030104>
- Richards, J. C. (2001). *Curriculum design in language teaching*. Cambridge University Press.
- Sobhanmanesh, A. (2021). *Enhancing the motivation and classroom engagement of EAP learners in a Canadian community college: A participatory action research approach*. University of Ottawa.
- Syakur, A., Zainuddin, H., & Hasan, M. A. (2020). Needs analysis English for specific purposes (ESP) for vocational pharmacy students. *Budapest International Research and Critics in Linguistics and Education (BirLE) Journal*, 3(2), 724–733. <https://doi.org/10.33258/birle.v3i2.901>
- Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches*. Sage.
- West, R. (1994). Needs analysis in language teaching. *Language Teaching*, 27(1), 1–19. <https://doi.org/10.1017/S0261444800007527>
- Zand-Moghadam, A., Meihami, H., & Ghiasvand, F. (2018). Exploring the English language needs of EAP students of humanities and social sciences in Iran: A triangulated approach. *Issues in Language Teaching (ILT)*, 7(1), 135–164. <https://doi.org/10.22054/ilt.2019.47351.434>
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