

Assessment of academic English language needs of Iranian post-graduate students of psychology

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Abstract

Needs analysis, as an important phase in curriculum development and course design, has received scant attention in Iranian English for Academic Purposes (EAP) education. Similarly, no systematic empirical study has addressed the status of EAP programs for post-graduate psychology (PGP) students. Hence, this study aimed to investigate target academic English language needs of PGP students, their abilities in performing discipline-related EAP tasks, and their General English Proficiency (GEP). Participants included 343 PGP students, 13 EAP instructors, and 22 content teachers from 7 major Iranian universities. To achieve triangulation, data were collected through questionnaires, semi-structured interviews, and observations. The findings highlighted several skills and sub-skills of academic English as highly important for PGP students. Moreover, some mismatches were found regarding the participants' perceptions about students' abilities in different language skills/sub-skills as well as in their GEP levels. Furthermore, we probed participants' viewpoints regarding the amount of EAP instruction in post-graduate curriculum, the degree of effectiveness of General English (GE) and EAP courses in BA education, their preference for EAP teachers (i.e., either ELT instructors or content teachers), language skill priorities in EAP courses, and major challenges in EAP education in Iran. Some implications and suggestions for further research are presented.

Keywords: needs assessment, English for Academic Purposes (EAP), psychology, post-graduate students, Iran.

Resumen

Evaluación de las necesidades lingüísticas en inglés académico de los estudiantes iraníes de posgrado de psicología

El análisis de necesidades, pese a constituir una importante fase en el desarrollo del currículo y en el diseño de cursos, ha recibido muy poca atención en la enseñanza de inglés para fines académicos en Irán. Tampoco existen estudios empíricos sistemáticos acerca del estatus de los programas de inglés para fines académicos para los estudiantes de posgrado de psicología. Así pues, el presente artículo pretende investigar las necesidades lingüísticas de estos estudiantes en inglés académico, sus habilidades para llevar a cabo tareas de inglés académico relacionadas con su disciplina y su competencia general en inglés. Los participantes fueron 343 estudiantes de posgrado de Psicología, 13 docentes de inglés para fines académicos y 22 profesores de asignaturas de contenido de siete de las principales universidades iraníes. Para triangular los resultados, los datos se obtuvieron mediante cuestionarios, entrevistas semiestructuradas y observaciones. Los resultados muestran que varias destrezas y subdestrezas relacionadas con el inglés académico son muy importantes para los estudiantes de posgrado de Psicología. También se han identificado algunos desajustes en las percepciones de los participantes respecto a las habilidades de los estudiantes en diferentes destrezas y subdestrezas lingüísticas, así como en sus niveles de competencia general en inglés. Asimismo, se han explorado los puntos de vista de los participantes sobre la cantidad de instrucción en inglés para fines académicos dentro del currículo de posgrado, la eficacia de los cursos de inglés general y para fines académicos en el nivel de grado, sus preferencias en relación con los profesores de inglés académico (profesores de inglés o de asignaturas de contenido), sus prioridades en cuanto a las destrezas lingüísticas en los cursos de inglés para fines académicos y los principales desafíos en la enseñanza de inglés académico en Irán. Por último, se señalan algunas implicaciones y sugerencias para futuras investigaciones.

Palabras clave: evaluación de necesidades, Inglés para Fines Académicos (ifa), Psicología, estudiantes de posgrado, Irán.

1. Introduction

English is widely used all over the world by students, teachers, and researchers for educational and research purposes, and this, in turn, could pose a serious challenge for those whose first language is other than English (Charles & Pecorari, 2016). As a branch of English for Specific Purposes (ESP), English for Academic Purposes (EAP) programs have been designed and implemented at secondary and tertiary education levels worldwide, which have provided great support for students by targeting their needs (Jordan, 1997). In fact, as Hutchinson and Waters (1987: 53) maintain, “what distinguishes ESP from general English is not the *existence* of a need as such, but rather an *awareness* of the need”. The ESP movement, thus, grew out of the realization that learners’

needs in particular domains and contexts were not taken into account due to the less direct nature of the instruction provided in General English (GE) courses and their failure to expose the learners to the skills really needed in target language use domains (Charles & Pecorari, 2016). Therefore, Needs Analysis (NA), which is deeply rooted in the history of ESP and has a crucial role in all phases of course design and implementation including teaching and materials development (Hyland, 2006; Long, 2005; West, 1994), should be conducted in order to identify, among other things, the skills and knowledge learners require but currently lack. Attention to students' needs and interests as a defining feature of the learner-centered curriculum (Hutchinson & Waters, 1987) may substantially enhance their motivation (Dooey, 2010) by considering their voices in course design and materials development (Belcher, 2006). Moreover, inherent to the nature of ESP education is accountability and efficiency in terms of time, money, and resources, and this could be materialized through developing courses and curricula based on the findings of NA studies (Dudley-Evans & St John, 1998).

1.1. Needs Analysis: Scope and methodology

There have been several definitions of *needs* by different scholars. In a very recent definition, Brown (2016) acknowledges the various conceptualizations of needs and considers them from four main viewpoints: 1) dramatic view: stakeholders' wants and expectations, 2) discrepancy view: deficiencies or missing elements, 3) analytic view: what students should learn next based on SLA theory and experience, and 4) diagnostic view: necessities. As to analysis, he points out eleven analysis strategies, namely, target-situation use analysis, target-situation linguistic analysis, target-situation learning analysis, present-situation analysis, gap analysis, individual-differences analysis, rights analysis, classroom-learning analysis, classroom-teaching analysis, means analysis, and language audits, which could be used singly or, more productively, together.

The review of more than two decades of NA literature indicates that NA procedure has gradually evolved in terms of sources and methods of data collection as well as the focus on particular language skills (Hamp-Lyons, 2011). More specifically, while earlier studies (e.g. Ferris, 1998) probed the perceptions of a few stakeholders via a few data collection techniques (mainly interviews or questionnaires) about one or a few skills, the recent ones (e.g. Atai & Shoja, 2011; Wozniak, 2010) have employed triangulation of both sources and methods to address more than one skill. Also, recently researchers

have investigated EAP methodology and the perceptions of teachers and learners in this regard. For example, Atai and Tahririan (2003) and Mazdayasna and Tahririan (2008) explored the perceptions of stakeholders about the optimal qualifications of EAP instructors. Hutchinson and Waters (1987) maintain that EAP teachers should have a positive attitude and some rudimentary knowledge of the subject matter. Moreover, they believe the EAP teacher should not be considered a content instructor, but rather “an interested student of the subject matter” (p. 163) who is able to gain content knowledge through “teaching materials or talking to students” (p. 163).

1.2. EAP research and practice in Iran

Although the language of mainstream education in Iran is Persian, students take compulsory discipline-based EAP courses at university in addition to usual GE courses (Atai & Shoja, 2011). The current EAP education system in Iran has received much criticism (e.g., Hayati, 2008; Hejazi, 2013; Soodmand Afshar & Movassagh, 2016; Tavakoli & Tavakol, 2018). Attempts to develop EAP programs in Iran date back to the 1970s when joint projects with western universities were launched; however, most of these programs were not research-informed (Atai, 2002). Later, in the 1980s, the Organization for Researching and Composing University Textbooks in the Humanities (abbreviated in Persian as SAMT) was launched by the government, leading to publication of eight EAP textbooks consisting of subject-specific texts with conventional reading activities. From the 1990s onwards, SAMT has developed more than 200 EAP textbooks with collaboration of both content teachers and English Language Teaching (ELT) teachers (Atai & Shoja, 2011). Although several rigorous studies have investigated academic English needs of Iranian students in different university majors (e.g. Atai & Nazari, 2011; Atai & Shoja, 2011; Mazdayasna & Tahririan, 2008), materials development and course design procedures in Iran have unfortunately been performed based on EAP practitioners’ ad hoc and intuitive rather than research-informed decisions (Atai, 2002) to the extent that a pressing need for a systematic revision of EAP programs in Iran is strongly echoed in the literature (Hejazi, 2013; Tavakoli & Tavakol, 2018).

1.3. The present study

Given the utmost importance of NA in curriculum design and materials development (Brown, 2016; Long, 2005), there is dearth of systematic

research on academic English language needs of Iranian students (Atai & Shoja, 2011) to the extent that curriculum developers have entirely abandoned NA and developed courses mainly based on their own intuitions (Atai, 2002). As Atai (2002) maintains, EAP goals set by Iranian authorities seem too broad, and more investigation is required to identify students' real academic English needs in higher education system. Moreover, although the Iranian government has made enormous educational and financial investments, the EAP courses still receive considerable criticism. For example, in the field of psychology, no graded, informed, up-to-date, and comprehensive EAP textbooks are available in Iran, and most psychology students are not fully aware of their diverse language needs (Hejazi, 2013). Therefore, rigorous research could provide beneficial results to inform course design and materials development.

Moreover, our extensive review of literature worldwide did not indicate any systematic study of the academic English language needs of post-graduate psychology (PGP) students. Considering the undeniable importance of English for Humanities students (Li & Flowerdew, 2009), this study aimed to assess the academic English needs of PGP students in 7 major Iranian universities through triangulations of sources and methods. Robinson's (1991) skills-based view of language and language learning was chosen as the theoretical framework in this study due to its close consideration of vocabulary, collocations, and different types of texts and genres. More specifically, informed by Brown's (2016) 'democratic view' (wants/expectations) and 'discrepancy view' (deficiencies/ gaps) of needs, the present study aimed to address Iranian PGP students' academic English needs.

The following research questions motivated the present study:

1. How do stakeholders including EAP teachers and PGP students evaluate PGP students' present abilities in performing various discipline-related EAP tasks?
2. Is there any statistically significant difference among PGP students and EAP teachers regarding their perceptions of PGP students' present abilities in performing different discipline-related EAP tasks?
3. Is there any statistically significant difference among PGP students, EAP teachers, and content instructors in terms of their perceptions

- about PGP students’ present level of General English Proficiency (GEP)?
4. What are the academic English needs of PGP students from the perspectives of PGP students, content instructors, and EAP teachers?
 5. Is there any statistically significant difference among different stakeholders’ perceptions regarding PGP students’ target academic English needs?

2. Method

2.1. Participants

As Brown (2016) maintains, in NA studies, researchers gather data on views of various groups of stakeholders such as “students, teachers, administrators, teaching assistants, parents, future professors in content area courses, future employers, and politicians” (p. 49), among whom teachers, students, and local administrators are ‘key stakeholder groups’. Due to feasibility issues, the present study probed only the views of students and teachers. In doing so, a total of 385 participants including 343 PGP students (41% male & 59% female; 78% MA & 22% PhD), 22 content teachers (68% male & 32% female; 100% PhD in Psychology; teaching experience: 5-25 years), and 13 EAP teachers (46% male & 54% female; 23% MA in ELT & 77% PhD in Psychology; teaching experience: 2-12 years) from 7 major Iranian universities were chosen. Sample representativeness was ensured since the selected universities enroll students from all over Iran and offer a wide variety of psychology branches such as clinical, counseling, educational, exceptional children, family, general, and health. In addition, all students were randomly selected through cluster sampling during the 2011-2012 academic year (2 semesters). Figure 1 shows participants’ demographic information.

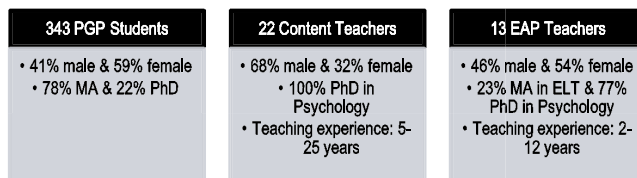


Figure 1: Participants’ demographic information.

2.2. Instrumentation

To ensure maximum credibility of the findings, a wide range of quantitative and qualitative data collection methods including questionnaires, GEP self-assessment, semi-structured interviews, and non-participant observations were employed. The questionnaires sought information on participants' demographic features, PGP students' target academic English needs as well as their present abilities, and a wide range of other EAP and GE issues. The GEP self-assessment probed students' present level of English proficiency based on CEFR levels. In addition, semi-structured interviews with content teachers and EAP instructors were conducted to gain deeper insights into their views expressed in questionnaires. We also obtained interviewees' detailed viewpoints on various general and specific English issues. Finally, non-participant observation was conducted to collect information on students' present and target situation needs and to triangulate the data collected from the other sources and methods.

2.2.1. *Questionnaire development*

The NA questionnaire in this study was developed based on the relevant NA literature (e.g. Dudley-Evans & St John, 1998; Hutchinson & Waters, 1987; Hyland, 2006; Jordan, 1997; Long, 2005), some already validated NA questionnaires (e.g. Atai & Nazari, 2011; Atai & Shoja, 2011; Mazdayasna & Tahririan, 2008), informal unstructured interviews with EAP, ELT, and content teachers as well as PGP students, and observation of some EAP and content classes. Three versions of the same questionnaire with some slight differences for PGP students, EAP teachers, and content instructors were developed to obtain their views about PGP students' target academic English needs, their present level of ability in performing different discipline-related EAP tasks, and some other EAP and GE issues. In addition, one open-ended question was included in questionnaires to elicit participants' views on major challenges in EAP teaching and learning.

To ensure maximum clarity on the part of respondents, all questionnaires were developed in Persian, the respondents' native language. Later, they were submitted to two ELT and two psychology professors to further check for clarity, content-relatedness, and format. Furthermore, in a pilot study with representative samples of the corresponding participants, the Cronbach's Alpha Coefficient of reliability for questionnaires was calculated as .84, which is very high. Moreover, the results of Principal Component Factoring

(PCF) with Varimax rotation method indicated the items loaded on seven key factors including 'productive skills' (writing and speaking), 'listening', 'reading', 'word meaning and dictionary use', 'grammar and vocabulary', 'research writing and presentation', and 'translation' in the section for target situation needs and five other factors including 'productive skills' (writing and speaking), 'reading and translation', 'listening', 'grammar and vocabulary', and 'dictionary use' in the section for present situation needs.

2.2.2. Interview development

Semi-structured interviews with both EAP teachers and content instructors were also conducted to elicit their views on a wide range of relevant academic issues. These were used to triangulate the data gathered through questionnaires. The interview questions were prepared based on the same underlying theoretical framework of the study, observation of several EAP and content classes, and some informal, unstructured interviews with PGP students, EAP teachers, and content instructors. In addition, a few questions from the interview sections of the other published works such as Mazdayasna and Tahririan (2008), Atai and Nazari (2011), and Atai and Shoja (2011) were adapted and used. Then the questions were submitted to a panel of EAP teachers and content instructors for a further check, and some modifications were applied to them. Finally, 11 questions for EAP teachers and content instructors were prepared to elicit their ideas about different issues related to GE and EAP. All interviews were carried out in Persian, i.e. the teachers' first language, to ensure maximum understanding. Each interview took approximately 45-60 minutes, which allowed the interviewees to express their opinions freely.

2.2.3. Non-participant observation

To gain a deeper understanding of students' needs (Long, 2005), non-participant observation of 15 EAP and 7 content classes was employed as a qualitative technique. Basturkmen's (1998) observation protocol was used to carefully examine 'instructional activities', 'students' activities', 'students' difficulties', and 'other issues' (for unexpected aspects). The observation protocol was piloted before data collection in two similar classes, and some necessary modifications were applied with the help of an EAP expert. To gain teachers' trust and observe the ethical concerns (Mackey & Gass, 2016), both the observation protocol and aims of the study were discussed with them in advance.

2.2.4. GEP self-assessment

The GEP self-assessment scale asked students to judge their own GEP according to the Common European Framework of Reference (CEFR) levels. It is noteworthy that this scale is a valid measure of assessing the GEP level due to its high correlation with the IELTS examination (Atai & Shoja, 2011). However, this last part was slightly different for EAP teachers and content instructors; they were asked to judge and estimate the percentage of students meeting each CEFR level.

2.3. Procedure

Triangulation of different sources and methods was used to investigate academic English needs of PGP students. First, 15 EAP classes and 7 content classes were observed by the second author of this study during the 2011-2012 academic year (2 semesters). Along with the first step, 410 questionnaires were distributed among the students. With the response rate of 84%, 343 students filled in the questionnaires completely and returned them in person or via email. Next, both EAP teachers and content instructors were met and interviewed in their free office hours by the second researcher. In addition, most of them agreed to complete a slightly different version of the students' NA questionnaire at that time, later, or via email. In all stages, the confidentiality and anonymity of the collected data were guaranteed for the participants. The interviews were conducted in the teachers' first language, i.e. Persian, and each interview took about 45-60 minutes, which was sufficient for the interviewees to voice their opinions freely. Finally, the interviews were analyzed thematically to identify the recurrent themes.

2.4. Design and data analysis

The research design of the present study was descriptive. All the data collected from different sources and methods were analyzed in order to present a thick description of the students' present and target needs. Various statistical tests such as Chi-Square, Mann-Whitney, and Kruskal-Wallis were run in SPSS (version 20) to analyze the data. Moreover, the results obtained from questionnaires and interviews were descriptively analyzed. Furthermore, Cronbach's alpha coefficient and Exploratory Factor Analysis were utilized to check the reliability and construct validity of the questionnaire, respectively.

3. Results

3.1. Present-situation academic English abilities

The first research question addressed the perceptions of post-graduate students and EAP teachers about the students' current abilities in performing discipline-related EAP tasks. To answer this question, we analyzed the participants' viewpoints on the language skills, sub-skills, and components they believed students had difficulty with or needed to improve. The findings are summarized in Table 1. We decided on a cutoff point for reporting the frequency of respondents' views and reported the exact percentages for the language skills, sub-skills, and components which reached 40%. In other words, the frequencies below 40% were not considered as distinctive patterns of attitudes.

PGP students <i>have difficulty with</i> ...	PGP Students (%)	EAP Teachers (%)
Writing term papers in English	48.4	61.5
Writing CV/resume in English	40.5	53.8
Presenting papers in English at conferences	41.7	46.2
Taking part in oral academic discussions in English	42.9	76.9
Asking and answering questions in English in classes and seminars	43.1	84.6
Using English to communicate with psychology specialists in real situations	49	100
Taking notes in English from books, seminars, and classes	Below 40%	69.2
Comprehending field-relevant talks/lectures in English	Below 40%	53.8
Listening to professors' teaching in English	Below 40%	61.5
Participating in conferences and comprehending lectures in English	Below 40%	76.9
Listening to general English conversations	Below 40%	76.9
Comprehending class seminars in English	Below 40%	100
Using English to correspond with foreign professors and specialists in psychology	Below 40%	61.5
PGP students <i>need improvement in</i> ...	PGP Students (%)	EAP Teachers (%)
Reading and comprehending texts, articles, and abstracts in English	42	46.2
Comprehending grammar and structure of English sentences	47.8	46.2
Guessing the meaning of new words from context	42	53.8
Comprehending field-relevant lectures in English audio and video sources	51.3	46.2
Understanding English word formation	48.7	46.2
Learning common grammatical structures in academic English texts	46.9	76.9
Writing articles and abstracts in English	43.1	46.2
Using technical dictionaries including English-Persian, Persian-English, and English-English	Below 40%	46.2
Using general dictionaries including English-Persian and Persian-English	Below 40%	61.5
Translating technical texts from English to Persian for further use in other courses and research	Below 40%	76.9
Using the Internet for accessing English sources	Below 40%	53.8
Writing CV/resume in English	Below 40%	46.2
Speaking with correct English pronunciation	Below 40%	76.9
Using English technical psychology terms in preparing course slides	Below 40%	61.5%
Presenting papers in English at conferences	Below 40%	53.8%
Listening to professors' teaching in English	48.1	Below 40%
Understanding technical psychology terms in English in courses taught in Persian	44	Below 40%
Understanding general English vocabulary	42.3	Below 40%
Participating in conferences and comprehending lectures in English	52.8	Below 40%
Listening to general English conversations	46.6	Below 40%
Comprehending class seminars in English	46.9	Below 40%

Table 1: Participants' views about PGP students' present abilities in performing different discipline-related EAP tasks.

Regarding the second research question, because the data did not have normal distribution and the dependent variable was continuous in nature (Larson-Hall, 2010), the Mann-Whitney U-Test was used as the proper statistical test to probe any statistical differences between PGP students and EAP teachers. As shown in Table 2, the results confirm a statistically significant difference between PGP students and EAP teachers regarding their perceptions of the PGP students' present level of ability in performing different discipline-related EAP tasks ($U = 1276.500, P = .009$).

Participants	N	Mean Rank	Sum of ranks	Mann-Whitney U	Asymp. Sig (2-tailed)
PGP Students	343	181.28	62178.50	1276.500	.009
EAP Teachers	13	105.19	1367.50		
Total	356				

Table 2: Results of Mann-Whitney U test for differences between PGP students and EAP teachers' perceptions of present situation needs.

Considering the third research question, the results of the GEP self-assessment based on the six-band scale of CEFR revealed that most students perceived their GEP as being 'A2' (30%) and 'B1' (32.9%). Moreover, 14% chose 'A1' and 14.6% 'B2' level. A small number of students thought their GEP was 'C1' (6.7%) and 'C2' (1.7%) level. As to teachers, EAP teachers believed 27% of PGP students were at 'A1', 33% 'A1', 25% 'B1', 9% 'B2', 4% 'C1', and 2% at 'C2' level. Content teachers believed that 29% of the students were at 'A1', 32% 'A2', 21% 'B1', 10% 'B2', 5% 'C1', and 3% at 'C2' level.

We ran a Chi-Square test to measure the statistical differences between categorical variables. The results, as illustrated in Table 3, showed no statistically significant difference among students, content instructors, and EAP teachers regarding their perceptions of the PGP students' present level of GEP ($\chi(1) = 11.102, P = .350$).

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.102*	10	.350
Likelihood Ratio	11.497	10	.320
Linear-by-Linear Association	4.440	1	.035
N of Valid Cases	300		

*3 cells (16.7%) have expected count less than 5. The minimum expected count is 2.33.

Table 3: Results of Chi-Square test for differences among PGP students' self-assessment of their GEP and EAP teachers' and content instructors' assessment.

3.2. Target-situation academic English needs

The fourth research question probed into the academic English language needs of PGP students from the perspectives of PGP students, content instructors, and EAP teachers. Table 4 summarizes the language skills, sub-skills, and components perceived as ‘very important’ or ‘important’ to PGP students’ target situation language use. Again, we decided on a cutoff point for reporting the frequency of respondents’ views and reported the exact percentages for the language skills, sub-skills, and components which reached 40%. In other words, the frequencies below 40% were not considered as distinctive patterns of attitudes.

(Very) Important academic English needs	PGP Students (%)	EAP Teachers (%)	Content Instructors (%)
Reading and comprehending texts, articles, and abstracts in English	65.9	46.2	59.1
Understanding general English vocabulary	44.3	69.2	50
Using general dictionaries including English-Persian and Persian-English	43.7	46.2	54
Translating technical texts from English to Persian for further use in other courses and research	48.1	46.2	50
Using the Internet for accessing English sources	56.6	46.2	45
Understanding English word formation	40.5	53.8	50
Learning common grammatical structures in academic English texts	40.8	61.5	50
Using English technical psychology terms in preparing course slides	42.6	Below 40%	59.1
Using technical dictionaries including English-Persian, Persian-English, and English-English	43.7	Below 40%	72.7
Understanding technical psychology terms in English in courses taught in Persian	54.8	Below 40%	72.7
Understanding psychology professors’ English slides in class’	Below 40%	61.5	54.5
Guessing the meaning of new words from context	Below 40%	46.2	54
Writing CV/resume in English	Below 40%	53.8	59.1
Comprehending field-relevant talks/lectures in English audio and video sources	Below 40%	46.2	54.5
Speaking English with correct pronunciation	Below 40%	61.5	50
Using English to communicate with psychology specialists in real situations	Below 40%	46.2	45
Asking and answering questions in English in classes and seminars	Below 40%	46.2	Below 40%
Comprehending grammar and structure of English sentences	Below 40%	Below 40%	50
Writing articles and abstracts in English	Below 40%	Below 40%	63.6
Presenting papers in English at conferences	Below 40%	Below 40%	45.5
Presenting papers in English at conferences	Below 40%	Below 40%	45.5
Listening to professors’ teaching in English	Below 40%	Below 40%	54.5
Participating in conferences and comprehending lectures in English	40.2	Below 40%	Below 40%
Listening to general English conversations	Below 40%	Below 40%	Below 40%
Comprehending class seminars in English	Below 40%	Below 40%	Below 40%
Taking part in oral academic discussions in English	Below 40%	Below 40%	Below 40%
Taking notes in English from books, seminars, and classes	Below 40%	Below 40%	Below 40%
Writing term papers in English	Below 40%	Below 40%	Below 40%
Using English to correspond with foreign professors and specialists in psychology	Below 40%	Below 40%	Below 40%

Table 4: Participants’ views about PGP students’ target situation academic English needs.

As for the fifth research question, the Kruskal-Wallis test was run to find any statistical differences between PGP students’, EAP teachers’, and content

instructors' views. As Table 5 depicts, there is no statistically significant difference among PGP students, content instructors, and EAP teachers regarding their perceptions about PGP students' target academic English needs ($\chi^2(2) = .210, P = .900$).

Group Name	N	Mean Rank	df.	Chi-Square	Asymp. Sig.
Post-Graduate Students	343	189.57	2	.210	.900
EAP Teachers	13	177.88			
Content Teachers	22	195.34			
Total	378				

Table 5: Results of Kruskal-Wallis test for differences among PGP Students', EAP teachers', and content instructors' perceptions of PGP students' target academic English needs.

3.3. Participants' views about the amount of EAP instruction

The majority of PGP students (81.3%) and EAP instructors (76.9%) considered EAP course units on post-graduate degrees inadequate. With respect to the number of EAP sessions per week, a large number of the PGP students (46.2%) and EAP teachers (45.2%) preferred two sessions per week. Moreover, while PGP students expressed their preference for post-graduate EAP instruction in four semesters (40.5%) and two semesters (27.1%), EAP instructors preferred three semesters (38.5%) and two semesters (30.8%).

3.4. Efficiency of general English and EAP courses

Whereas about 47% and 54.4% of EAP teachers considered BA general English and EAP courses, respectively, as inefficient, a larger percentage of PGP students (78.5% & 60%, respectively) held this view.

3.5. Preference for the teacher of EAP courses

PGP students expressed their preference for collaborative teaching (48.4%) – in which both an ELT instructor and a subject-matter teacher run EAP courses jointly – and a subject-matter EAP teacher (32.1%) whereas EAP teachers believed these courses should be taught by ELT instructors (41.7%) and subject-matter teachers (33.3%).

3.6. Participants' views about the content of EAP courses

Both PGP students and EAP instructors considered 'reading technical texts in English' (students: 81.92%, teachers: 83.33%), 'writing technical texts in

English' (students: 77.55%, teachers: 75%), 'speaking in English' (students: 50.14%, teachers: 58.33%), 'listening and comprehending technical English' (students: 71.13%, teachers: 50%), 'general English vocabulary' (students: 53.06%, teachers: 66.66%), 'specific English vocabulary' (students: 86%, teachers: 91.96%), 'correct pronunciation' (students: 83.67%, teachers: 75%), and 'translating technical texts from English to Persian and vice versa' (students: 91.54%, teachers: 58.33%) as essential contents of EAP courses. However, whereas all EAP teachers (100%) thought 'grammar and structure of English sentences' should be taught in EAP courses, less than half of the students (45.77%) considered it necessary.

3.7. The language of psychology academic sources

An equal percentage of both PGP students and EAP teachers (38.5%) considered academic sources 'written in English' very crucial for their progress. Moreover, more than half of the students (57.1%) and EAP instructors (53.8%) preferred both Persian and English sources.

3.8. Challenges in teaching and learning EAP in Iran

With respect to challenges of teaching and learning EAP in the field of psychology, the participants' views were elicited through semi-structured interviews and the open-ended items in the questionnaires. The following problems were raised by the participants:

- Students' low and heterogeneous GEP level;
- Inadequate EAP course units in post-graduate curriculum;
- Lack of well-qualified EAP teachers;
- Conventional, counter-productive EAP methodology, e.g. undue emphasis on translation and memorization of lexical and grammatical points,
- Absence of a national, coherent EAP curriculum;
- Lack of a rigorous evaluation method;
- Inadequacy of EAP courses;
- Optionality of EAP courses in post-graduate programs in most universities;
- Lack of up-to-date and appropriate psychology EAP textbooks;
- Lack of audio-visual technology in classes;
- Lack of real target situation demands for using specialized English for psychology.

3.9. Results of observations

Various issues were identified as a result of conducting non-participant observations. The first noticeable problem was the large number of students in EAP classes with heterogeneous GEP levels, which made class management very difficult for the EAP teachers. Interestingly, this problem was echoed by several teachers during the interviews. Second, most EAP teachers were content instructors with low GEP level. Unfortunately, at times, their feedback on students' pronunciation and translation was incorrect. In addition, they rarely used the board or even made a lively interaction with students. With respect to post-class interactions with students, only one teacher reported follow-up communication via email or face-to-face interaction at his office as a routine activity. Furthermore, almost all teachers, except one, had not provided the students with any course syllabus. These results are in line with EAP teachers' acknowledgments, in interviews, about their low GEP level and lack of expertise in teaching EAP courses. Third, as to class activities, they were mainly limited to cursory reading and word-for-word translation. In addition, teachers occasionally explained grammatical and lexical points. It is noteworthy that almost all classes were mainly run in Persian, which is again in line with interview results. The teachers did not include any instruction of speaking, listening, and writing in their routine activities. Moreover, they rarely assigned any pair/group work; just one teacher asked students to join in groups and extract specialized vocabulary from the text and summarize a few paragraphs for oral reproduction. Fourth, the classes were mainly teacher-fronted with students having little interaction with the teacher and their peers except for answering cliché reading comprehension questions such as true-false, sentence completion, and multiple-choice questions. Fifth, teachers mostly used some old-fashioned textbooks which did not seem interesting to the students. Some teachers had downloaded or photocopied texts from psychology encyclopedias, the Internet, or general psychology books, which were not at the right difficulty level and lacked the expected pedagogical value as EAP materials. In addition, we found limited use of technology in the classes. One EAP teacher used a video projector set to brief the assigned tasks for the students' readings. Notably, these last two points, i.e. lack of up-to-date textbooks and limited technology use, were also echoed by students in their responses to the open-ended questions included at the end of their questionnaire and also by EAP teachers in interviews. Last, the classes were not normally taken seriously by the students and nearly half of them were

utterly uninterested in class activities. A large number of students did the classroom translation activities rather carelessly, and there were manifest indications of violations of simple grammatical and lexical norms.

3.10. Results of interviews

To triangulate the data obtained from the other sources and methods, gain deeper insights on issues raised in the questionnaires, and elicit more detailed perceptions about various GE and EAP issues, semi-structured interviews with EAP teachers and content instructors were conducted. In what follows, a brief account of the questions posed and teachers' positions are outlined.

1. *How do you rank the four major language skills in terms of importance for PGP students?*

Reading and writing were generally perceived as the most important skills by most teachers, followed by listening and speaking.

2. *Considering the fact that students take EAP courses at BA, is it necessary to offer such courses at post-graduate level as well?*

Almost half of the teachers believed that an EAP course should also be included in the post-graduate curriculum for psychology students as in this program students may have different academic needs compared with their BA program. However, half of them believed that EAP courses for BA students should be developed and implemented much more professionally so that students may not need to re-take such courses at MA or PhD levels and could invest their time in content courses and research.

3. *How important is GEP in learning EAP?*

Almost all teachers considered GE as an essential foundation for EAP learning. Moreover, they held that a reasonable threshold of general English vocabulary and grammar should be built if EAP learners intend to target the academic tasks inherent in their mainstream specialized language use domains. Otherwise, the courses may be downgraded to terminology practices and fail to incorporate the required language skills.

4. *Which of the four major language skills are difficult for students to learn?*

A large number of EAP teachers believed listening, speaking, and writing are very difficult for students to learn. They mainly attributed this to undue attention paid to reading and translation in GE and EAP courses.

5. *How do you evaluate PGP students' overall proficiency in the four major language skills?*

Approximately 75% of the EAP teachers perceived students' competence as 'very poor' in serious academic writing tasks, such as writing research abstracts and papers, and listening/speaking activities such as lecture comprehension and interaction. On the other hand, students' reading skills were perceived to be better than the other three language skills. However, teachers stressed that the students need more focused instruction on improving their translation skills as well as sub-skills of academic reading corresponding to their reading tasks including skimming and scanning.

6. *What is the optimal time, in the curriculum, to present EAP courses for post-graduate psychology students?*

About half of the EAP instructors and content teachers believed EAP should be included as an obligatory course during the first year of MA/PhD programs in two consecutive semesters. This, to a great extent, confirms the views they expressed in the questionnaires.

7. *Do you consider EAP course units on post-graduate psychology programs sufficient?*

Almost all EAP instructors and content teachers considered EAP course units in MA and PhD programs as insufficient, which is in line with the views of about 77% of the teachers already elicited through the questionnaires. The situation seems to be the same in BA programs, and several scholars have raised serious criticism about the inadequacy of EAP instruction in Iran (e.g. Atai, 2002; Hayati, 2008; Khany & Tarlani-Aliabadi, 2016; Soodmand Afshar & Movassagh, 2016).

8. *Who is a better candidate to teach EAP courses: ELT instructors or content teachers?*

The participants' responses are illustrated in Figure 2. Most EAP teachers believed that ELT instructors who are very interested in and have enough

discipline-based content knowledge of general psychology are better candidates for teaching EAP courses. About 25% of EAP teachers, however, were of the opinions that content teachers may be more qualified for this job. Finally, a very small number of the EAP teachers thought EAP courses should be taught cooperatively by both content instructors and ELT instructors. These results are partially in line with EAP teachers' opinions in questionnaires: 41.7% of them perceived that EAP courses should be taught by ELT instructors, 33.3% by content teachers, and the rest (25%) by both content instructors and ELT instructors jointly. Content instructors, on the other hand, did not provide a definite answer to this question. Their basic argument was that the EAP teacher, whether from the psychology or ELT department, should possess an adequate GEP level and, at least, some basic discipline-based content knowledge in general psychology.

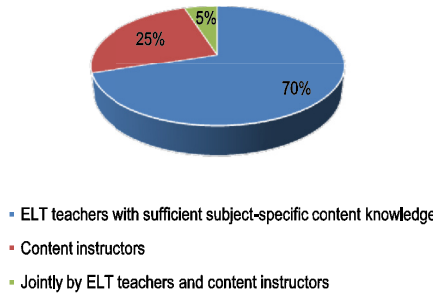


Figure 2: EAP teachers' and content instructors' views about the optimal EAP teacher.

9. *How much Persian and English do you use in your EAP classes?*

All EAP teachers said they rarely use English to run their classes since it is very difficult for most students to understand their talks in English. Surprisingly, 60% of EAP instructors (who were content teachers) acknowledged their low GEP level for teaching EAP courses and the fact that some of them teach EAP courses simply to fill their weekly schedule.

10. *Are major sources of psychology published in English or Persian?*

Content teachers believed that most up-to-date psychology textbooks and articles are published in English. They maintained if students intend to keep up with the most recent advances in the field, they should have an excellent command of both general and specific English.

11. *In your opinion, what are the major challenges in teaching and learning EAP in Iran?*

The very first underlying problem pointed out was students' low GEP level, followed by the lack of an established, coherent national curriculum for teaching and learning EAP for psychology. As to EAP materials, some teachers referred to the insufficient number of up-to-date, comprehensive psychology EAP textbooks. Moreover, some teachers believed that EAP teachers themselves lack the relevant expertise in teaching EAP courses. In addition, a few number of EAP teachers complained about having students at different proficiency levels in their classes. Furthermore, some EAP teachers shared the belief that a rigorous evaluation and reappraisal of the current Iranian EAP system is highly required. Last but not least, students' lack of motivation and insufficient number of EAP course units at MA and PhD were also raised by the majority of teachers.

4. Discussion

The current study aimed to investigate academic English needs of Iranian PGP students, their ability in performing discipline-related EAP tasks, and their GE proficiency via triangulation of different sources and methods. Regarding PGP students' present level of abilities in performing different discipline-related EAP tasks, the results indicated that they are fairly good at most tasks related to 'grammar and vocabulary' and 'reading and translation' but weak at 'productive skills' (writing and speaking). PGP students' weakness in productive skills could be attributed to the EAP textbooks currently used in Iranian higher education system which mostly focus on developing reading comprehension, grammar (Khany & Tarlani-Aliabadi, 2016), and translation skills, thus failing to take into account learners' essential needs such as lecture comprehension and writing research papers which are extremely important for post-graduate students (Hayati, 2008). However, the situation is apparently getting better since SAMT has recently published a new generation of EAP textbooks based on a coherent materials development framework that involves both ELT and subject-matter experts (Atai & Fatahi-Majd, 2014).

As the results of Mann-Whitney U test demonstrated, EAP teachers and the students were not in agreement about students' abilities. Further analysis of the results revealed that the two groups had different perceptions in most

‘productive skills’, most ‘reading and translation’ skills, and all sub-skills of ‘listening’ and ‘dictionary use’. Comparing the results of PGP students and EAP teachers more carefully and item-by-item, it became evident that students had overestimated their abilities in the aforementioned tasks. It is noteworthy that EAP teachers’ perceptions matched their own ideas and those of content instructors in interviews. To conclude, EAP practitioners should define achievable goals by considering students’ present level of abilities in English. In addition, students’ perceived difficulties are in line with Atai (2002) who is doubtful with regard to whether university students have indeed acquired the necessary and prerequisite academic skills and reading strategies before being assigned the reading of authentic texts. The significant correlation between EAP students’ GEP on entry to EAP programs and their overall ability to perform target academic reading tasks has already been reported in the literature (Hyland, 2006).

Generally, as the questionnaire findings were confirmed by those of the interviews and observations, all stakeholders considered various sub-skills of ‘productive skills’ (writing and speaking), ‘listening’, ‘reading’, ‘word meaning and dictionary use’, ‘grammar and vocabulary’, ‘research writing and presentation’, and ‘translation’ as important target academic English needs for PGP students. This is, to some extent, in line with Esfandiari’s (2015) results which indicated that law students and instructors considered general and technical vocabulary as well as dictionary use as important target academic English needs. All in all, as the Kruskal-Wallis test results confirmed, EAP teachers and the PGP students shared the same perceptions about PGP students’ target situation needs. Given the fact that “the extent to which perceptions are shared directly influences questions of language policy, curricula, and pedagogy” (Taillefer, 2007: 146), it is very fortunate that stakeholders in this study are in almost complete agreement regarding target situation academic English needs. In other words, they evidently have a clear, common picture of the target situation; however, their perceptions and voices are apparently not taken into account for designing curricula and syllabi in the current Iranian EAP education system. In this study, there was one discrepancy in teachers’ judgments: while EAP teachers and PGP students identified students’ needs for communication with psychology experts in real situations such as conferences (listening to lectures and asking/answering questions) and correspondence with foreign professors and reviewers/editors of academic journals, content instructors considered them as irrelevant or unnecessary. The results are mostly in line with Soodmand

Afshar and Movassagh (2016) who found the preferences of students from various disciplines for speaking activities in contrast to their teachers who considered this need as very unimportant. It seems, in this case, that EAP teachers and students have idealistically looked at the target situation because, in reality, very few Iranian psychology students take part in international conferences, and almost all classes and seminars are run in Persian in the Iranian context. Although Long (2005) emphasizes the realistic examination of target situation needs, the perceptions of participants in this study might be a good indication that they are looking forward to positive changes in the current Iranian EAP system. Given the fact that most important conferences are held internationally in English, and prestigious, peer-reviewed journals and leading publications are mostly published in English, Iranian materials developers should take these points into account and write well-prepared textbooks accordingly. Mazdayasna and Tahririan (2008) criticize the Iranian Ministry of Science, Research, and Technology for not offering any “clear guidance for selecting and developing basic academic instructional materials related to the linguistic or communicative standards expected by students” (pp. 277-8), which gives EAP “a marginal status in the tertiary education” (p. 278). They also highlight the limited scope and ‘text-centeredness’ of the present EAP programs in Iran which are mainly ‘examination-oriented’.

Regarding PGP students’ GEP level, the Chi-Square test results indicated that all three groups, namely, the PGP students, EAP teachers, and content instructors held the same perceptions. More specifically, most students were at A1, A2, and B1 levels corresponding to ‘beginner’, ‘elementary’, and ‘intermediate’ levels, respectively. Students’ unsatisfactory low GEP level was also echoed by most EAP teachers in interviews and easily noticeable in class observations. This problem as highlighted here in this study and elsewhere (e.g. Atai & Nazari, 2011; Mazdayasna & Tahririan, 2008) calls for more serious attention by course designers in EAP instruction.

About the adequacy of EAP course units, most post-graduate students and EAP teachers believed the number of EAP course units at MA and PhD programs is insufficient. This could be due to financial reasons leading to the optional nature of EAP instruction in MA programs and its complete absence in PhD programs in Iran. In addition, as the results of interviews and questionnaires confirmed, nearly half of the EAP teachers and content instructors were in favor of having two EAP sessions per week in more than just a single semester. These findings are in line with Soodmand Afshar and

Movassagh (2016) who reported students' and teachers' dissatisfaction with the amount of EAP instruction both per week and per semester. In addition, the results are in agreement with Atai's (2002) comment on the inadequate time allocated to EAP education in Iran given the wide gap between students' present and target academic English needs. In fact, the amount of time dedicated to EAP classes should be reconsidered (Khany & Tarlani-Aliabadi, 2016) by increasing EAP course units and students' exposure to English in the classroom context (Atai & Shoja, 2011; Mazdayasna & Tahririan, 2008).

With regard to the optimal time for taking EAP courses, it seems the first academic year of post-graduate degrees is the best option, as most EAP teachers and content instructors held this view and believed that 'the sooner, the better' policy should be adopted. This is also in line with the types of general and specialized content courses students are expected to take during their programs. As some students commented, in Iran, first-year post-graduate students are not fully engaged in serious research and may have sufficient time to work on their academic English needs.

Regarding the overall efficiency of GE and EAP courses at BA, participants' views indicated that they do not fully prepare students in terms of their academic language needs at MA and PhD levels. Such a dissatisfaction has also been reported in several studies (e.g. Atai & Shoja, 2011; Soodmand Afshar & Movassagh, 2016) and might result from lack of any systematic and coherent curriculum design (Atai, 2002), uninteresting EAP textbooks, counter-productive EAP methodology, inefficient assessment methods, and the large number of students in EAP classes (Mazdayasna & Tahririan, 2008), students' low GEP level (Khany & Tarlani-Aliabadi, 2016), lack of well-qualified EAP teachers, lack of well-prepared EAP textbooks, inadequate EAP class time, undue emphasis on reading and translation activities and thus failure to address communicative activities, and teacher-fronted classes (Hayati, 2008), and the absence of any collaboration between ELT and subject-matter instructors (Atai & Fatahi-Majd, 2014).

Based on questionnaire findings, approximately one-third of PGP students and EAP teachers believed content instructors should teach EAP courses. Others were divided over either having an ELT teacher or running EAP courses by cooperation of both content instructors and EAP teachers. In contrast, content instructors in interviews indicated that they were not sure about the answer but stated the EAP teacher should possess an adequate GEP level and, at least, some basic knowledge in general psychology. However, the

fulfilment of this standard seems impractical, and EAP courses are taught by either ELT or content teachers in Iran (Hayati, 2008) without any collaboration between content instructors and ELT instructors at classroom implementation level (Atai & Fatahi-Majd, 2014). Apparently, a fundamental revision is needed in ESP course implementation in general as well as training and selecting EAP teachers in Iranian universities. More specifically, content instructors' and ELT instructors' involvement in implementation of EAP courses could be further explored at three levels, namely, cooperation, collaboration, and team-teaching (Dudley-Evans & St John, 1998). Also, EAP teacher education programs could be set up for both pre-service and in-service teachers.

Regarding the priorities in EAP courses, PGP students and EAP teachers are evidently in favor of teaching both GE and specialized academic content and materials in EAP courses, which might be justified by students' low GEP as also indicated in CEFR assessments and teachers' interviews. More specifically, a large number of PGP students and EAP teachers were in agreement that EAP courses should help students improve their discipline-based reading, writing, speaking, and listening skills, provide them with both general and specific English vocabulary, and teach them essential skills for translation into and from English. However, in observations, only a few of these priorities, namely, reading, simple grammatical explanations, vocabulary instruction (mostly specialized academic vocabulary), and translation were the dominant class activities, as was the case in EAP classes for nursing and midwifery classes in Mazdayasna and Tahririan's (2008) study. This problem could be due to students' low GEP (Atai & Shoja, 2011) as well as EAP teachers' inadequate level of GE and limited EAP teaching skills, as echoed in the interviews and recorded in observation of EAP classes.

According to the questionnaire and interview results, most EAP teachers and PGP students believed both that English and Persian sources are useful in psychology studies. In addition, a large number of EAP teachers and students (about 40%) considered English sources as more reliable and credible, which is in line with content teachers' preference for English sources. As a result, if students intend to keep abreast of new advances in the field, they must improve their GE and EAP proficiency to read up-to-date textbooks and articles written in English.

Regarding the major challenges in learning and teaching psychology EAP in Iran, the findings attested to some major challenges and confirmed the

previous empirical literature: students' low and heterogeneous GEP level, optionality of EAP courses at post-graduate level in most Iranian universities, lack of well-qualified EAP teachers, conventional, counter-productive EAP methodology (e.g., undue emphasis on translation and memorization of lexical and grammatical points), absence of any coherent national EAP curriculum, lack of a rigorous evaluation method, lack of up-to-date, suitable psychology EAP textbooks, lack of audio-visual technology in classes, and lack of real target situation demands for using specialized English for psychology. Moreover, the architecture of the classes observed in this study, and generally many classes in Iran, is not suitable for effective EAP instruction. More specifically, almost all of them are conventionally designed with students sitting in rows of seats bolted to the floor, which could be the reason for the limited interaction among the students and the EAP teacher (Khany & Tarlani-Aliabadi, 2016).

5. Conclusion and implications

The present study confirms the existing literature and contributes additional evidence to the fact that if ESP courses fail to satisfy learners' needs, students will "underperform, feel dissatisfied with their abilities, or [become] frustrated with certain aspects of the course" (Liu, Chang, Yang, & Sun, 2011: 271).

The current EAP curriculum for the students of psychology in Iran suffers from a serious lack of accountability in terms of fulfilling post-graduate students' and teachers' needs and expectations. As a possible solution, curriculum developers, syllabus designers, and materials developers need to rely more on research findings in order to re-define and operationalize clear, attainable goals for EAP programs (Atai, 2002) and consequently revise the present EAP textbooks and programs by accommodating all stakeholders' perceptions. Also, the current condition could be improved by starting "a gradual transition from the current traditional EAP programs to critical EAP programs in Iranian universities, in which Iranian EAP students (as well as teachers) are encouraged to engage their due rights to decide about different aspects of their academic life" (Khany & Tarlani-Aliabadi, 2016: 83). Under such circumstances, students' learning and autonomy as well as accountability in the educational system would be enhanced (Basturkmen, 2010).

As Brown (2016) maintains, teachers, students, and local administrators are the three main stakeholders in needs assessment studies. Therefore, based on

the findings of the present study, it seems absolutely vital that relevant authorities assume grave responsibility for “casting a large net to cover many sources allowed for opportunities to identify needs and also to filter out any inaccurate perceived needs through the use of triangulation” (Cowling, 2007: 429). Hence, further studies could also seek the views of local administrators as well as teaching assistants and future employers.

ESP practitioners should fulfil several key, flexible roles (Hutchinson & Waters, 1987) such as teaching, designing courses and providing materials, conducting research, consulting and facilitating, collaborating with subject specialists, and evaluating students, courses, materials (Dudley-Evans & St Johns, 1998). Therefore, there is a pressing need in EAP teacher education for incorporating more process-based approaches to screening, training, and recruiting EAP teachers based on well-established procedures and data derived from the contextual challenges these teachers face in local contexts (See Atai & Nejadghanbar, 2017). In fact, future studies should exclusively focus on EAP teachers because EAP teaching poses potential challenges for new EAP teachers (Martin, 2014). EAP teachers are expected to reconsider their roles, assume responsibilities corresponding to the local EAP contexts, and enhance their language teaching methodologies accordingly (Atai, 2002). One good option would be setting up EAP teacher education programs based on the existing models such as the British Association of Lecturers in EAP’s (BALEAP) competency guidelines (2008). In addition, future research should specifically address how cooperation, collaboration, and team-teaching could be performed by EAP and subject-matter departments in all phases of curriculum development, course design, and, of course, the actual teaching process.

Another practical implication is that students’ low GEP level should be considered in developing GE and EAP courses. More specifically, since the ability to read state-of-the-art sources in English is of utmost importance, key measures should be taken to guide students in an appropriate academic English route. For instance, more course units could be dedicated to EAP at post-graduate levels, preferably in the beginning semesters. Also, remedial GEP courses could be set up for students whose GEP is below the acceptable level for taking EAP courses (Atai & Shoja, 2011).

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