

Reading Comprehension Needs of Iranian Medical Students

Shiva Kaivanpanah

Associate Professor, University of Tehran

shkaivan@ut.ac.ir

Abdurrashid Khazaei Feizabad

Ph.D., University of Tehran,

Kish International Campus

arkhazaei@yahoo.com

Abstract

The present study aimed to assess the target and present reading comprehension needs and abilities of Iranian medical students with different levels of English language proficiency. A total of 283 medical students and 23 ESP instructors were chosen through cluster sampling. The data collection instruments included the Persian version of Atai and Nazari's (2011) needs analysis questionnaire and a 40-item language proficiency test. The obtained results indicated that *'general vocabulary'* and *'medical terminology'* were considered 'important' in facilitating the comprehension of medical texts. In addition, the findings revealed that medical students need to improve all reading sub-skills. Furthermore, the respondents' perceptions were significantly different with regard to students' target needs and present abilities in reading comprehension. Finally, there was no statistically significant difference in students' target and present needs and abilities across different levels of language proficiency. The findings have potential implications for the improvement of medical EAP courses.

Keywords: English for Academic Purposes, Needs Analysis, Reading Comprehension, Medical Students

Received: June 2015; Accepted: December 2016

1. Introduction

Similar to many other countries, English for Academic Purposes (EAP) has a basic role in Iranian higher education system; in fact, students in almost all fields have to take language courses as well as some specialized courses in English. Although the primary language of instruction in Iran is Persian, discipline-based EAP programs are compulsory courses at universities (Atai & Shoja, 2011). Investigation on these courses, then, can be of great importance. Based on the extensive use of these EAP courses in the Iranian academic context, several studies have attempted to identify academic English problems of medical students (e.g., Atai & Anbarshahi, 2003; Ghalandari & Talebinejad, 2012; Hessamy & Mohebi, 2014; Jafari & Shokrpour, 2012a; Vosoughi, Sharifabad, & Raftari, 2013; Zarein-Dolab, 2009). However, few studies have analyzed the reading comprehension needs of medical students through exploring the perceptions of medical students and instructors. Therefore, the present study aimed to investigate the target and present reading comprehension needs of medical students in Iran by analyzing the viewpoints of medical students in different stages and their instructors.

2. Background

English for Specific Purposes (ESP) originated in the late 1960s and early 1970s as a response to the growing predominance of English in academia and international commerce (Howatt & Widdowson, 2004). Hyland (2006) asserts that EAP, as a branch of ESP, had a rapid evolution to the extent that in the beginning of the 21st century it turned into a major force in English language teaching and research around the world and was then situated at the forefront of theory development and innovative practice in teaching English as a

second/foreign language. Meanwhile, needs analysis is at the heart of ESP course design (Bosher & Smalkoski, 2002; Jordan, 1997) and is considered a major step in the process of planning and designing these courses (Bachman & Palmer, 1996; Dudley-Evans & St John, 1998; Hyland, 2006; Long, 2005; Richards, 2001; Lytle, 1988). Curriculum can be developed by addressing the learners' needs, a fact, which is required for teachers to be successful in their teaching practices. In fact, what distinguishes General English from English for Specific Purposed (ESP) is "the awareness of the need" (Hutchinson & Waters, 1987, p. 53). As Hamp-Lyons (2001) argues, General English begins with the language while EAP begins with the learner and the situation.

With regard to the importance of needs analysis, Jordan (1997) states that, "needs analysis should be the starting point for devising syllabuses, courses, materials, and the kind of teaching and learning that takes place" (p. 22). Target Situation Analysis (TSA) and Present Situation Analysis (PSA) are two approaches to needs analysis (Jordan, 1997). While TSA focuses on deciding what learners need to be like at the end of the language course, PSA tries to find out what they are like at the beginning of the course. Hutchinson and Waters (1987) introduced a comprehensive framework for TSA which was comprised of a list of questions. Making attempts to provide answers for these questions from variety of sources helps the researcher to arrive at a satisfactory profile of the target needs of the learners. PSA can be considered as a complement to target situation analysis (Jordan, 1997; Robinson, 1991). Jordan (1997) argues that a satisfactory outcome of needs analysis will require a combination of both TSA and PSA.

Review of needs analysis studies in Iranian context is twofold. First, it suggests that needs may be field dependent so that dissimilarities can be partly

Reading Comprehension Needs of Iranian...

attributed to the different majors of the learners. Second, it illuminates the areas in medical context which require investigations.

Table 1. Needs Analysis Studies in the Iranian Context

Study (year)	Objectives	Participants	Findings	Limitations
Rostami & Zafarghandi (2014)	to investigate chemistry students' and instructors' perceptions of the English language needs of these chemistry students.	90 chemistry students and 20 instructors at the Chemistry Colleges of Guilan and Tehran, Iran	English: very important in education and work Reading: the highest skill vocabulary and reading speed: the main; writing and reading skills: the slightest importance	Limited to chemistry students
Mazdayasna & Noori (2014)	investigating the academic learning needs of Iranian undergraduate students of English Language and Literature	320 stakeholders: 252 undergraduate, 51 graduates, 7 English literature instructors, 10 language instructors	students are not adequately equipped with learning and communication strategies during their academic and pre-academic studies	English students were studied
Dehnad, Bagherzadeh, Bigdeli, Hatami, & Hosseini (2014)	To assess the reading and writing needs of postgraduate students in ESP courses on the basis of critical approach to needs analysis	67 people: 56 postgraduates, 5 heads of departments, 5 ESP instructors, 1 executive manager at the Ministry of Health in Iran	there was a discrepancy between students' and instructors' perception of learners' needs and the assumed needs appearing in the syllabi	Post graduates were studied
Atai & Shoja (2011)	To assess the present and target situation academic language needs of undergraduate students of computer engineering	231 undergraduates, 30 graduates, 20 computer engineering instructors; 15 ESP instructors at three major Iranian universities	Written skills and language components are important. Undergraduates: need more general English than highly specific academic English	Limited to computer students

Atai & Nazari (2011)	To assess target and present reading comprehension needs of EAP students of Health Information Management	15 content teachers, 10 EAP teachers, 15 graduate students, 180 undergraduate students majoring in HIM at three major medical universities, Tehran, Iran	'skimming texts', 'using bilingual general dictionaries', 'scanning texts', HIM terminologies', 'guessing meanings of words', and 'understanding main ideas: either 'important' or 'very important' to students' success by all the participants. undergraduates' GEP, in general, and reading comprehension, in particular, is lower than required	Limited to Health Information Management
Eslami (2010)	to describe the perception of EAP students and instructors toward the problematic areas in EAP programs	693 EAP students majoring in different academic fields and 37 instructors	Discrepancy between the perceptions of different EAP learners and instructors	Students of different fields were studied
Mazdayasna & Tahirian (2008)	to investigate the foreign language learning needs of undergraduate medical sciences students studying in faculties of nursing and midwifery in Iran	681 undergraduate students as well as 168 subject-specific instructors and 6 EFL instructors	Most students: need to master the foreign language before their specialized courses. Over one-third dissatisfied with crowded classes, teaching methodology, evaluation method, amount of foreign culture in the class and content of the textbook. Subject-specific instructors: dissatisfied with their students' language skills	Only nursing and midwifery students were studied

Reading Comprehension Needs of Iranian...

Although reading comprehension in English is the most important skill and the main concern of ESP instructors and students in the Iranian academic context (Jafari & Shokrpour, 2012b; Sajadi & Oghabi, 2011; Tabatabaei, 2007), none of these needs analysis studies, to the best of the researchers' knowledge, has examined the present and target reading comprehension needs of Iranian medical students. The present study, therefore, was designed to assess medical students' reading comprehension needs from students' and their instructors' perspectives. More specifically, the following research questions guided this study:

1. What are the reading comprehension needs of Iranian medical students as perceived by different takeholders (i.e., basic sciences students and post-basic science students, EAP instructors, and content instructors)?
2. Is there any significant difference among the four groups of stakeholders regarding their perceptions of the medical students' target and present reading comprehension needs?
3. Do students with different reading proficiency levels have the same target and present reading comprehension needs?

3. Method

3.1. Participants

Medical students of different stages at Zahedan University of Medical Sciences, EAP instructors and content instructors (CI) in the 2015-2016 academic year participated in the present study. Medical students are the students who are going to be general practitioners after about seven years studying medicine. Of 306 participants, 283 were medical students with a mean age of 21.49 years (males=126, females=157), and 23 instructors (9 EAP

instructors and 14 content instructors (CI)) with a mean age of 47.39 years and at least 10 years of teaching experience.

Students were classified into two groups of Basic Sciences Stage students (BSS) who were taking their 5th or below semesters (n=188) and Post-Basic Sciences Stage students (PBS) who had completed at least 5 semesters (n=95). The students were placed in these two categories since in the first 5 semesters, medical students complete their Basic Sciences Stage and in Zahedan University of Medical Sciences they take a course of either general or specialized English in any of those five semesters; from semester 6 upwards, they no longer take English courses and are seriously required to be able to cope with the reading of English medical texts employing the reading sub-skills that they have possibly acquired in their previous English classes.

3.2. Instruments

Persian translation of the needs analysis questionnaire developed by Atai and Nazari (2011) was used to identify reading comprehension needs of the medical students. The first part of the questionnaire with 20 items addresses students' target needs in reading comprehension using a four-point Likert scale (Not important=1, Rather important=2, Important=3, Very important=4), and the second part containing 27 items deals with students' present reading comprehension skills using a five-point Likert scale (I can't=1, Not good=2, Need improvement=3, I can do=4, Good=5). The questionnaire was piloted with 51 medical students in the same university. Using Cronbach's alpha, the reliability of the instrument turned out to be 0.74. A slightly modified version of the same questionnaire was completed by both groups of the instructors.

The second instrument was a quick placement test, developed by the University of Cambridge Local Examination Syndicate (2001) was

Reading Comprehension Needs of Iranian...

administered to the students to evaluate their general English proficiency. The test contains 40 items, comprising 15 vocabulary items, 15 grammar items, and 10 cloze test items. According to the instruction of the test, the participants were divided into the following four groups based on their scores on the test (Table 2)

Table 2. *Level of General English Proficiency Based on the Quick Placement Test*

LEVEL	Paper and Pen Test Score
0 Beginner	0-15
1 Elementary	16-23
2 Lower intermediate	24-30
3 Upper intermediate	31-40

3.3. Procedures

Data were collected in November and December, 2015. Initially, in order to minimize any misunderstanding by the respondents, the questionnaire was translated from English into Persian. After the participants completed the questionnaire, and in a single session, the quick placement test was administered to them. They had 30 minutes to take the test. The EAP and CI instructors also completed the questionnaire in their offices. All questionnaire were completed and collected the same or following day. The collected data were submitted to SPSS (version 23) for further analyses.

4. Results

This study examined target and present reading comprehension needs of Iranian medical students in Iran from the viewpoints of different stakeholders including the four groups of participants (BSS and PBS students, CI and EAP instructors). The first research question probed the target and present reading

comprehension needs of the medical students from the perceptions of different participants presented in Tables 3, 4, and 5. As it is shown in Table 3, of all 20 reading comprehension sub-skills on target needs, ‘*general vocabulary knowledge*’ was considered important and ‘*knowledge of medical terminology*’, ‘*Guessing the meaning of unknown words using the context*’, and ‘*Understanding the main idea of the sentences*’ were considered ‘very important’ by almost all participants.

Table 3. Reading Comprehension Sub-Skills on Target Needs

Sub-skills	Degrees of importance	BSS	PBS	EAP	CI
General vocabulary knowledge	Very important	46.8	27.4	22.2	21.4
	Important	31.9	48.4	55.6	64.3
	Rather important	17.6	18.9	0.0	14.3
	Not important	3.7	5.3	22.2	0.0
Medical terminology	Very important	43.9	48.4	55.6	85.7
	Important	40.1	33.7	22.2	14.3
	Rather important	15.0	12.6	0.0	0.0
	Not important	1.1	5.3	22.2	0.0
Guessing the meaning	Very important	38.8	35.8	55.6	50.0
	Important	44.1	40.0	22.2	42.9
	Rather important	14.4	17.9	0.0	7.1
	Not important	2.7	6.3	22.2	0.0
Understanding the main idea of the sentences	Very important	44.9	44.4	44.2	64.3
	Important	38.0	40.0	33.3	35.7
	Rather important	13.4	11.6	0.0	0.0
	Not important	3.7	4.2	22.2	0.0
Using monolingual general dictionary	Very important	10.8	14.7	0.0	21.4
	Important	41.6	29.5	33.3	42.9
	Rather important	38.4	42.1	44.4	28.6
	Not important	9.2	13.7	22.2	7.1
Using bilingual general dictionary	Very important	20.9	11.6	22.2	0.0
	important	42.8	24.2	22.2	28.6
	Rather important	27.3	55.6	51.6	57.1
	Not important	9.1	12.6	0.0	14.3
Basic Sciences Stage students (BSS), EAP instructors (EAP),	Post-basic Sciences students (PBS), Content instructors (CI)				

Reading Comprehension Needs of Iranian...

However, using dictionaries was considered ‘very important’ only by a small percentage of the respondents (12.6%). As shown in Table 3, two sub-skills, namely, ‘*Using monolingual general dictionary*’ and ‘*Using bilingual general dictionary*’ were generally considered as just ‘rather important’ by almost all four groups.

Meanwhile, ‘*using monolingual medical dictionaries*’ and ‘*using bilingual medical dictionaries*’ were considered ‘very important’ by only 19.3% and 17.0% of all participants, respectively. Generally, with regard to other sub-skills as target needs, the perceptions of the respondents were discrepant.

The second part of the questionnaire probed the perceptions of different respondents with respect to medical students’ current ability levels in sub-skills reading comprehension. Results indicated that all EAP instructors and almost all content instructors believed that medical students are not good at any of these sub-skills. Overall, according to the perceptions of different respondents, medical students’ ability in comprehension medical reading passages is not good, and they need improvement. Tables 4 and 5 show the present reading comprehension ability of the medical students from different stakeholders’ viewpoints.

Table 4. Agreement on Students’ Need for Improvement among Different Respondents on Present Reading Comprehension Abilities of Medical Students

Sub-skills	BSS	PBS	EAP	CI
Critically evaluating what is read	42.9	46.2	85.1	75
Underlying critical information text	34.3	34	88	72
Familiarity with different genres like books and articles	29.2	35.4	66.1	35.7
Reading articles on medicine	31.2	43.2	55.1	35.7

As indicated in Table 4, a high percentage of the respondents especially EAP instructors believed that medical students needed to improve their ability in the following four sub-skills: ‘*Critically evaluating what is read*’, ‘*Underlying*

critical information text, *'Familiarity with different genres like books and articles'*, and *'Reading articles on medicine'*.

Meanwhile, as Table 5 shows, there was a discrepancy among the perceptions of the respondents with six sub-skills concerning present reading comprehension needs of medical students.

Table 5. Differences among Respondents Regarding the Present Reading Comprehension Abilities of Medical Students

Sub-skills	Students' abilities	Stakeholders' ideas (%)			
		BSS	PBS	EAP	CI
Setting purpose for reading	None	4.8	8.4	0.0	7.1.
	Not good	11.2	8.4	55.6	42.9
	Needs improvement	47.3	43.2	44.4	42.9
	Able	28.2	24.2	0.0	0.0
	Good	8.5	15.8	0.0	7.1
Previewing the text before reading	None	5.9	6.3	0.0	21.4
	Not good	20.7	15.8	55.6	28.6
	Needs improvement	29.8	30.5	44.4	35.7
	Able	36.7	37.9	0.0	14.3
	Good	6.9	9.5	0.0	0.0
Skimming the text	None	4.3	6.3	0.0	0.0
	Not good	18.1	10.5	55.6	57.1
	Needs improvement	39.4	38.9	44.4	14.3
	Able	27.1	33.7	0.0	21.4
	good	10.1	9.5	0.0	7.1
Scanning the text	None	4.8	9.5	22.2	28.6
	Not good	25.5	21.1	33.3	42.9
	Needs improvement	36.7	33.7	44.4	
	Able	26.1	27.4	0.0	28.6
	good	6.9	8.4	0.0	0.0
Understanding the main idea of the sentences	None	3.2	5.3	22.2	14.3
	Not good	12.8	12.6	77.8	50.0
	Needs improvement	41.2	37.9	0.0	28.6
	Able	34.2	33.7	0.0	7.1
	good	8.6	10.5	0.0	0.0
Guessing the meaning of unknown words	None	3.8	2.1	22.2	7.1
	Not good	17.2	13.7	55.6	42.9
	Needs improvement	38.2	48.4	22.2	50.0
	Able	37.1	27.4	0.0	0.0
	good	3.8	8.4	0.0	0.0

Reading Comprehension Needs of Iranian...

Concerning the second research question and to find out whether there were any statistically significant differences among the four groups of respondents regarding their perceptions of the target reading comprehension needs of medical students, a Kruskal Wallis test was run. It should be noted that the rationale for using a Kruskal Wallis test was that the data were not normally distributed. The results (Table 6) indicate that there was a statistically significant difference among the perception of the groups with regard to the target reading comprehension needs of medical students ($H(3) = 10.28$, $p = 0.01$), with a mean rank of 147 for basic sciences students, 142 for post basic sciences students, 182 for EAP instructors, and 215 for content instructors.

Furthermore, to find out whether there were any statistically significant differences in the perceptions of the stakeholders with regard to the present reading comprehension needs of medical students, a Kruskal Wallis test was run. The results in Table 6 pointed to significant differences among the perception of the groups with regard to the present reading comprehension needs of medical students ($H(3) = 28.4$, $p = 0.01$), with a mean rank of 150.22 for basic sciences students, 16.40 for post basic sciences students, 34.00 for EAP instructors, and 78.29 for content instructors.

Table 6. *Difference among Respondents on the Students' Target and Present Reading Comprehension Needs according to Kruskal Wallis*

	Chi-Square (H)	Degrees of Freedom(df)	Sig	Mean Rank			
				BSS	PBS	EAP	CI
Target Needs	10.28	3	.016	147.19	142.59	182.22	215.86
Present Needs	28.4	3	.001	150.22	160.40	34.00	78.29

The third research question aimed to find out whether medical students with different proficiency levels have significantly different target and present reading comprehension needs. The results of the Kruskal Wallis test (Table 7) indicated that target reading comprehension needs of medical students with different proficiency levels were not significantly different ($H(3)=6.53$, $p=0.08$), with mean ranks of 138.75 for the beginner students, 130.13, 149.39, and 175.47 for elementary, pre-intermediate, and upper-intermediate students, respectively.

Moreover, to find out whether there were any statistically significant differences among the present reading comprehension needs of medical students with different proficiency levels, a Kruskal Wallis test was run. The results of the test (Table 7) indicated that there wasn't any statistically significant difference among the present reading comprehension needs of medical students with different proficiency levels ($H(3)=14.08$, $p=0.61$), with a mean rank of 156 for beginners, 151 for elementary learners, 131 for pre-intermediate learners, and 187 for upper-intermediate learners.

Table 7. Target Reading Comprehension Needs of Medical Students with Different Proficiency Levels

	Chi-Square (H)	Degrees of Freedom (df)	Sig	Mean Rank			
				Beginners	Elementary	Pre-intermediate	Upper intermediate
Target Needs	6.53	3	.088	138.75	130.13	149.39	175.47
Present needs	14.08	3	.061	156.11	151.59	131.68	187.65

4. Discussion and Conclusions

The present study was carried out to develop a profile of present and target reading comprehension needs of Iranian medical students. To this end, the perceptions of different stakeholders were obtained. Of all 20 sub-skills and activities as target reading comprehension needs, four sub-skills namely: *'general vocabulary knowledge'*, *'knowledge of medical terminology'*, *'Guessing the meaning of unknown words using the context'*, and *'Understanding the main idea of the sentences'* were considered as either 'important' or 'very important' by almost all respondents. The findings of the present study are partly in line with those of Atai and Nazari (2011) who reported that all 20 sub-skills including the above mentioned four sub-skills were considered important or very important by almost all participants. The present findings also showed that 'limited knowledge of vocabulary' was an important problem in understanding EAP medical texts, which is in agreement with the findings by Rostami and Zafarghandi (2014) who reported that vocabulary is among the main important areas in EAP context. This finding implies that vocabulary knowledge along with understanding the main idea are considered to play an important role in assisting the learners to better comprehend reading passages. This could be justified by the fact that the participants believe that lexicon carry much of the reading meaning with them. Moreover, the present findings showed that in the target needs section, there is a gravitation of the attention of the respondents to sub-skills which deal with vocabulary, suggesting the participants find vocabulary an important factor in better comprehension of medical texts in English. This finding is supported by Robinson (1991) who states that many people believe that vocabulary especially terminology is a crucial factor in ESP. However, surprisingly *'using dictionaries'* was not considered very important in better comprehension of medical passages. It can

be concluded that although 'words' are considered important in reading comprehension for medical students, other solutions rather than dictionary should be utilized.

Regarding the present reading comprehension needs of the medical students, most participants believed that medical students need improvement in '*Critically evaluating what is read*' and '*Underlying critical information text*', which suggests that respondents think that medical students do not manipulate the depth and underlying layer of meaning while reading. Their need for improvement in '*Familiarity with different genres like books and articles*' and '*Reading articles on medicine*' can be explained by the point that students' reading is limited mostly to some prescribed textbooks. Therefore, by providing students with different genres and medical articles, we can be hopeful to help them develop better reading comprehension skills.

Eslami (2010) and Dehnad et al. (2014) found that there was a discrepancy between the perceptions of EAP learners and instructors; however, in the present study, instructors and learners showed similar perceptions with regard to some sub-skills and discrepant ones concerning some others as shown in Tables 3-7. Therefore, the results of the present study are partly in line with those of other studies conducted in other disciplines and partly different which implies that many more studies employing different sources and approaches can enrich our understanding of the weak and strong points in reading comprehension status among Iranian students.

The results also showed that target and present reading comprehension needs and abilities of medical students do not significantly differ across different proficiency levels. It is, then, concluded that reading comprehension problems among Iranian medical students is not only related to linguistic elements but to non-linguistic factors as well. For example, as Robinson (1991)

Reading Comprehension Needs of Iranian...

believes, factors such as motivation and specialism are influential in ESP courses. In other words, how motivated students are in learning through ESP and/or how experienced they are in their specialism can have a great influence in their successfulness. Therefore, identifying factors which may take role in impeding reading comprehension among Iranian students can be an important step in removing the problems, and helping students improve their reading comprehension ability.

As Hutchinson and Waters (1987) argue, the findings of needs analysis studies can create the basis for curriculum development, syllabus design, materials development, and materials evaluation. Considering the Iranian government's much financial investment in EAP courses (Eslami 2010), the results of the present study offer implications for curriculum designers and material developers to renew the EAP courses and improve reading comprehension instruction for Iranian medical students. Moreover, EAP teachers may benefit from the findings to modify and update their teaching strategies in the course of teaching different EAP reading materials to medical students.

In the present study, much of the data were collected using questionnaire that can be a reason for inconsistencies in the findings. Therefore, and according to Long (2005), to avoid the inconsistencies triangulated studies and cross checking of data are suggested. Therefore, a triangulation needs analysis study is suggested so that by employing different sources and methods and the participation of different stakeholders, the reading comprehension needs and problems of Iranian medical students may be identified.

References

- Atai, M. R. , & Anbarshahi, S. (2003). The impact of the explicit instruction of the frequent grammatical patterns of ESM written discourse on ESP students reading comprehension. *Iranian Journal of Applied Linguistics*, 10(1), 115-132.
- Atai, M. R., & Nazari, O. (2011). Exploring reading comprehension needs of Iranian EAP students of health information management (HIM): A triangulated approach. *System*, 39(1), 30-43.
- Atai, M. R., & Shoja, L. (2011). A triangulated study of academic language needs of Iranian students of computer engineering: Are the courses on track? *RELC Journal*, 42(3), 305-323.
- Bachman, L. F., & Palmer, A. S. (1996). *Language testing in practice: Designing and developing useful language tests* (Vol. 1). New York: Oxford University Press.
- Bosher, S., & Smalkoski, K. (2002). From needs analysis to curriculum development: Designing a course in health-care communication for immigrant students in the USA. *English for specific purposes*, 21(1), 59-79.
- Dehnad, A., Bagherzadeh, R., Bigdeli, S., Hatami, K., & Hosseini, A. F. (2014). Post graduate ESP curriculum: Reading and writing Needs. *Acta Medica Iranica*, 52(5), 406.
- Dudley-Evans, T., & St John, M. J. (1998). *Developments in English for specific purposes: A multi-disciplinary approach*. Cambridge university press, Cambridge.
- Eslami, Z. R. (2010). Teachers' voice vs. students' voice: A needs analysis approach of English for acadmic purposes (EAP) in Iran. *English Language Teaching*, 3(1), 3.
- Ghalandari, S., & Talebinejad, M. R. (2012). Medical ESP textbook evaluation in Shiraz medical college. *Education Research Journal*, 2(1), 20-29.
- Hamp-Lyons, L. (2001). English for Academic Purposes. In R. Cartel, & D, Nunan. (Eds.), *The Cambridge guide to teach English to speakers of other languages* (pp, 126-130). Cambridge: Cambridge University Press
- Hessamy, G., & Mohebi, M. (2014). Perceptions of medical students and EFL instructors of their EAP materials, challenges and implications for Iranian EAP instructors. *Journal of Language Teaching and Research*, 5(1), 183-192.
- Howatt, A. P. R., & Widdowson, H. G. (2004). *A history of ELT*. Oxford University Press.
- Hutchinson, T., & Waters, A. (1987). *English for specific purposes: A learning centered approach*. Cambridge: Cambridge University Press.
- Hyland, K. (2006). *English for academic purposes*. Taylor and Francis.
- Jafari, S. M., & Shokrpour, N. (2012). EAP Students' Reading Motivation of English Academic Expository Texts: A Mixed Methods Design. *International Journal of Linguistics*, 4(4), 372.

Reading Comprehension Needs of Iranian...

- Jafari, S. M., & Shokrpour, N. (2012). The reading strategies used by Iranian ESP students to comprehend authentic expository texts in English. *International Journal of Applied Linguistics and English Literature*, 1(4), 102-113.
- Jordan, R. R. (1997). *English for academic purposes: A guide and resource book for teachers*. Cambridge University Press.
- Long, M. H. (2005). *Second language needs analysis*. Cambridge University Press.
- Lytle, S. L. (1988). From the inside out: Reinventing assessment. *Focus on basics*, 2(1), 1-4.
- Mazdayasna, G., & Noori, M. (2014). Developing a profile of learning needs of Iranian undergraduate students of English Language and Literature. *Iranian Journal of Applied Language Studies*, 6(2), 27-58.
- Mazdayasna, G., & Tahririan, M. H. (2008). Developing a profile of the ESP needs of Iranian students: The case of students of nursing and midwifery. *Journal of English for Academic purposes*, 7(4), 277-289.
- Molhim, M. A. (2011). English for medical purposes course design for Arab university students. *English for Specific Purposes World*, 32, 1-21.
- Richards, J. C. (2001). *Curriculum development in language teaching*. Ernst Klett Sprachen.
- Robinson, P. C. (1991). *ESP today: A practitioner's guide*. Hemel Hempstead: Prentice Hall.
- Rostami, F., & Zafarghandi, A. M. (2014). EAP needs analysis in Iran: The case of university students in chemistry department. *Journal of language Teaching and Research*, 5(4), 924-934.
- Sajadi, F., & Oghabi, M. (2011). Relation between instructors' objective needs and students' subjective needs: The case of Iranian post graduate students. *The Asian ESP Journal*, 7(4), 123-152.
- Syndicate, UCLE. (2001). *Quick placement test*. Oxford, Oxford University Press.
- Tabatabaei, O. (2007). Who qualifies to monitor an ESP course: A content teacher or a language teacher? *Indian Journal of Applied Linguistics*, 33(1), 77-86.
- Vosoughi, M., Sharifabad, E. D., & Raftari, S. (2013). Investigating current status of English for academic purposes (EAP) in Iran; Revisiting ESP specificity continuum. *International Journal of Applied Linguistics and English Literature*, 2(3), 54-61.
- Zarein-Dolab, S. (2009). Recall of general and medical vocabulary and text structure knowledge: An experimental study of English for medical purposes. *Journal of Medical Education*, 12(3, 4), 1251-1251.