Exploring motivating factors among Iranian medical and nursing ESP language learners

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Abstract: With respect to the prominence attached to motivation and its significant effect on learning in general and language learning in particular, the present study aimed at identifying the motivating factors affecting Iranian medical ESP learners using a checklist, interview, and questionnaire. To this end, ten students were interviewed from two different majors: nursing and medicine. A questionnaire with 30 items was developed using the responses from the interviews and distributed among one hundred and six ESP medical and nursing students. The results suggested that the students who studied medicine were more motivated compared to those who studied nursing. Based on the results of the factor analysis, the medical school students found “Teacher characteristics & teaching material”; “Immigration & personal aspirations”; and “Instrumental motivation” motivating while “Intrinsic/integrative motivation” and “Learning environment” were motivating for the nursing school students. Further investigations using two-way-within-between subjects ANOVAs, and one way ANOVAs revealed that students of medicine had a higher level of motivation, but their opinion regarding the factors they found motivating did not differ much from those studying nursing.

Subjects: Language & Linguistics; Language Teaching & Learning; General Language

Keywords: ESP; students of medicine; nursing students; motivating factors

Motivation and motivational factors play an important role in second or foreign language learning. The second language learners who have positive attitudes toward the target culture and people will be more successful in learning the target language than those without such positive attitudes. Aptitude and motivation are strongly correlated with learners’ L2 achievement. Most of the studies conducted in Iran have applied the integrative/instrumental dichotomy or include quantitative designs that do not necessarily provide us with a deep understanding about the motivational factors. We aimed to explore motivating factors among certain groups of ESP learners in Iran, employing a mixed method design. The study provides some insight as to the factors contributing to language learning motivation among Iranian medical students, or issues.
1. Introduction

In L2 motivation research, several studies have dealt with English language learning motivation (Dörnyei, 1990, 1998; Dörnyei & Ushioda, 2009; Gardner, 1985, 2006; Masgoret & Gardner, 2003; Sjöholm, 2004) in foreign as well as second language learning contexts. Some of the L2 motivation studies investigated motivation to study the languages other than English, for instance German (Kormos & Csizér, 2007; Macaro & Wingate, 2004; Nikolov & Józsa, 2006), French (Gardner, Masgoret, & Tremblay, 1993; McIntyre et al., 2002; Noels, Clément, & Pelletier, 1999; Williams, Burden, & Lanvers, 1997; Wright, 1999), Italian (Deponte, 2004), Arabic (Donitsa-Schmidt, Inbar, & Shohamy, 2004), and Chinese (Humphreys & Spratt, 2008; Rueda & Chen, 2005). Regardless of the differences in the implemented motivational models/theories, data collection procedures, and context, what all these studies share is the role motivation and motivational factors play in second or foreign language learning.

In line with the increasing interest in motivational studies and their impact on second and foreign language learning over the past fifty years, motivation has been widely investigated in Iran (i.e. Vaezi, 2008). However, most of the studies have applied the integrative/instrumental dichotomy or include quantitative designs that do not necessarily provide us with a deep understanding about the motivational factors. As a point of departure from previous studies, this study employed a mixed method design in order to contribute to foreign language learning with regard to motivation studies in L2 contexts. We aimed to explore motivating factors among certain groups of ESP learners in Iran. It is based on a quantitative study that shows a degree of originality, at least in the context of Iranian L2 students. The study provides some insight as to the factors contributing to language learning motivation among Iranian medical students.

1.1. Literature review

1.1.1. Motivation

Although the effect of motivation in the second/foreign language learning/teaching has been confirmed in many studies, there is controversy as to its exact definition. Motivation has been defined as “the extent to which certain stimuli, objects, or events affect the occurrence or non-occurrence of the behaviour in question” (Usova & Gibson, 1986; cited in Crump, 1995, p.5). Some other researchers describe it as the learner’s orientation in relation to the goal of learning a second language (Crookes & Schmidt, 1991). According to Steers and Porter (1991: 6), “motivation can be characterized as needs or expectations, behaviours, goals and some form of feedback”. Ryan and Deci (2000: 54) state that “to be motivated means to be moved to do something”. Dörnyei (2001) states that motivation is related to two dimensions of human behaviour, i.e. direction and magnitude (intensity) and accounts “it responsible for the choice of a particular action, the effort expended on it and the persistence with it”. (Dornyei, 2001: 7). Similrly, Gardner (2001a, 2001b) believes that motivation and language aptitude are the major elements in determining an individual’s success in learning another language in context of the classroom. Dornyei (2001:7) also showed that “motivation explains why people decide to do something, how hard they are going to pursue it, and how long they are willing to sustain the activity”. In what follows, a brief discussion on the major traditional and contemporary motivational models and related research on each is presented.

1.1.2. Gardner’s model of motivation

Drawing on the findings obtained from extensive studies on motivation, Gardner (1985) suggested that those second language learners who have positive attitudes toward the target culture and people will be more successful in learning the target language than those without such positive attitudes. In their previous studies, Gardner and Lambert (1959) came to the conclusion that aptitude and motivation strongly correlated with learners’ L2 achievement. In this model, motivation has been defined as the extent to which an individual works or tries to learn the language due to the desire to learn the language and the satisfaction he/she experiences in the process of learning the language. “A motivated learner with is, therefore, defined as one who is: (a) eager to
learn the language, (b) willing to expend effort on the learning activity, and (c) willing to sustain
the learning activity” (Gardner, 1985, p. 10). In this model, motivation has an important role in
three ways. First, it mediates any relationship between language attitudes and language achieve-
ment. Second, it also has a causal association with language anxiety. Third, it has a role in the
learning context which is informal, revealing the voluntary nature of the motivated learners’
participation in informal L2 learning contexts. In his current model, Gardner (2000) focused on
motivation and language aptitude as the two most essential factors in language achievement and
explains how integrative motivation influences language achievement. Furthermore, the model
can predict the fact that the L2 learning situation could impact the learners’ attitudes and
motivation.

Favoured from various versions of the AMTB (attitude motivation test battery), many studies
have focused on the role of motivation in ESL and EFL learning. However, the findings are widely
different due to differences in their instruments used, methods of analysis, and socio-cultural
contexts. While some studies show a correlation between integrative/instrumental attitudes and
language learning motivation (i.e. Chang & Huang, 1999; Ely, 1986; Vaezi, 2008; Ahmadi, 2011),
others indicate that integrative attitudes did not significantly contribute to motivation (i.e.
Kraemer, 1990). A further line of research has made a comparison between integratively moti-
vated language learners and their instrumentally motivated peers as to their proficiency (i.e. Fazel
& Ahmadi, 2011). In spite of the plethora of research on integrative/instrumental dichotomy, the
mere focus on the learner’s overall attitude does not account for motivational sources which are
nearly associated with the learner’s immediate learning situation. Thus, many researchers have
tried to develop a model that addresses some of the questions untouched by the integrative/
instrumental dichotomy.

1.1.3. Motivational framework of L2 motivation developed by Dornyei’s

Taking into account the criticisms on the integrative/instrumental dichotomy that accuse the
model of falling short of sufficiently focusing on the L2 instructional context, over emphasis on
integrativeness, and the limitations associated with it, Dornyei (2001, p. 34) calls for a more
“educational orientation in L2 motivation research. The common assumption underlying such an
educational movement seems to be a focus on motivational sources closely related to the
learner’s immediate learning situation rather than their overall attitudes toward the target culture
(i.e. integrativeness)”. Unlike Gardner (1985) who downgraded the role of the source of the
motivating impetus provided that motivation is aroused, Dornyei (1994) believes that L2 motiva-
tion is an eclectic, multifaceted construct which requires to incorporate different levels to integrate
various parts.

Following Crookes and Schmidt’s model (1991), Dornyei (1994) states that it is useful to divide L2
motivation into three motivational components (i.e. motives and motivational conditions): (a)
language level, (b) learner level, and (c) learning situation level. Language level is related to
orientations and motives pertinent to various aspects of the L2, such as the target culture and
the potential usefulness of L2 proficiency. The learner level deals with affects and cognitions
associated with motivational processes. Learning situation level is comprised of intrinsic and
extrinsic motives, and motivational conditions which consist of three parts: course-specific, tea-
cher-specific, and group-specific components. This model can be a useful framework not only for
language researchers and teachers to be used to identify motivational sources, but also to propose
motivational strategies.

The intrinsic/extrinsic motivation model has been applied to a variety of contexts. As is the case
with research conducted on instrumental/integrative motivation, the results are mixed due to
differences in data collection, data analysis, and … methods. Some studies have focused on the
correlation between integrative motivation and intrinsic motivation (e.g. Noels, Clement, &
Pelletier, 2001). The results reveal that integrative and intrinsic motivations are correlated. Other
studies focus on the impact of intrinsic/extrinsic motivation on the amount of language achievement (Moskovsky & Alrabai, 2009).

1.1.4. Williams and Burden’s framework of L2 motivation
Williams and Burden (1997) offer a framework for motivation in L2. They consider different perspectives of factors that impact L2 learner motivation; they divide them into internal and external factors. In their proposed framework, internal factors consist of intrinsic interest of activity, perceived value of activity, sense of agency, mastery, self-concept, attitudes, and other affective states while external factors consist of significant others, the nature of interaction with significant others, the learning environment, and society expectations and attitudes.

1.1.5. Dörnyei and Otto’s process model of L2 motivation
The Dörnyei and Otto’s process model of L2 motivation focuses on the primary desires to complete the action and the following retrospective assessment (Dörnyei, 2000; Dörnyei & Otto, 1998). It tries to combine different influential conceptualizations related to motivation in a systematic process-oriented framework (Dörnyei, 2000: 6). Dörnyei and Otto (1998) explained how motivation completes with the passage of time, and emphasized its dynamic nature. Stated otherwise, this model considers L2 learners’ motivation as something which is not stable; instead, it continuously changes in the long process of motivation for the L2 learning. Dörnyei (2000) asserts that the most important benefit of a process-oriented approach is that it presents a useful and effective method of interpreting and integrating the motivational factors that impact the student’s learning behaviour in the classroom context.

As expressed by Dörnyei and Otto (1998), the model consists of two parts: Action Sequence and Motivational Influences. The first part represents “the behavioural process whereby initial wishes, hopes, and desires are first transformed into goals, then into intentions, leading eventually to action and, hopefully, to the accomplishment of the goals, after which the process is submitted to final evaluation” (Dörnyei & Otto, 1998 p. 5). On the other hand, motivational effects contain the complete energy sources and motivational forces which feed the behavioural process. Action sequence consists of three phases: pre-actional, actional and post-actional stage (Dörnyei, 2000). Each stage can be influenced both by the learner and the environment external to the learner containing the classroom context and all that it includes (Winke, 1997).

1.1.6. Dörnyei’s framework of L2 self-system
Dörnyei’s (2005) Motivational Self System Theory borrows tenets from the possible selves’ theory (Markus & Nurius, 1986) and self-discrepancy theory (Higgins, 1996). Based on the theory, “possible selves represent individuals’ ideas of ‘what they might become, what they would like to become, and what they are afraid of becoming’, and so provide a conceptual link between the self-concept and motivation” (Markus & Nurius, 1987: 157). Dörnyei (2005) adapted the concepts of possible selves and self-discrepancy to the self of second language learners. He added three concepts in his Motivational Self System Theory, through which one can explain the second language motivational disposition of language learners. The Ideal L2 Self, the Ought-to L2 Self and Learning Experience are the three main parts of the Motivational Self System. The ideal self is the essential concept in this self-system, and it refers to the representation of the attributes that someone would ideally like to possess (i.e. a representation of personal hopes, aspirations or wishes). It is the L2-specific facet of one’s “ideal self”: if the person we would like to become speaks an L2, the “ideal L2 self” is a powerful motivator to learn the L2 because of the desire to reduce the discrepancy between our actual and ideal selves. Traditional integrative and internalized instrumental motives would typically belong to this component. (p. 29)

The existence and nature of the Ideal L2 Self has been confirmed in many studies (Csizér & Dörnyei, 2005a; 2005b; Csizér & Kormos, 2009; Csizér, et al., 2010; Dörnyei, et al., 2006; Kormos
Some other motivational variables have also been identified as contributors to the Ideal L2 Self, which is an indication of the main role the Ideal L2 Self in motivational self-constructs. According to Kormos and Csizér (2008), the attitude of secondary school learners and university students towards language learning are the contributors to the Ideal L2 Self. Other investigations suggest that the way the milieu establishes the relevance of learning a second or foreign language is also associated with the Ideal L2 Self.

A complement to the self-guide is the “Ought-to self”. The theory associates L2 to the individual’s personal “core”, and forms an important part of one’s identity. “It concerns the attributes that one believes one ought to possess to meet expectations and avoid possible negative consequences (i.e. various duties, obligations, or responsibilities)” (Dörnyei, 2009, p. 29). This dimension is in agreement to ought-to self and therefore to the more extrinsic types of instrumental motives. Research findings are not as much consistent with respect to the Ought-to L2 Self in comparison with the Ideal L2 Self. For instance, in an earlier study Kormos and Csizér (2008) did not find any evidence supporting the presence or otherwise of the Ought-to L2 Self. However, later studies (Kormos & Csizér, 2008) indicated that this dimension did not have an important role in language motivation.

The third dimension of the Motivational Self System Theory is placed on a different level to the Ideal and the Ought-to L2 Selves (Dörnyei, 2005). L2 Learning Experience “concerns situated, executive motives related to the immediate learning environment and experience (e.g. the impact of the teacher, the curriculum, the peer group, the experience of success)” (Dörnyei, 2005, p.29). The scope of this dimension can be extended to include several other affecting motivation (e.g. family, friends, language learning curriculum and/or policy) or can be limited to examination of the impact of only one variable (e.g. language classes).

Based on the findings of research, the three dimensions of the Motivational Self System Theory are not associated with each other and might be regarded as independent motivational variables (Csizér & Kormos, 2009). Thus, the theoretical framework is considered as a valid tool for determining the level of language learning motivation. In addition to the validity of its components, the L2 Motivational Self System Theory has two further advantages. First, it is fit to the L2 motivation research tradition if the social dimension is included. Second, the theory presents new routes for investigating the agenda through focus on the language learners’ “self”. Synthesizing the two trends of language motivation research may well yield useful new perspectives into foreign language learning motivation.

With respect to the pre-stated assertions, the following research questions are posed:

1. What are the motivating factors for Iranian ESP medical students?
2. Are the differences in the levels of language proficiency and motivation reflected in the student’s type of self-concept? How?

2. Materials and methods

2.1. Participants

The first group of participants consisted of six interviewees, more specifically, 3 male and 3 female students invited to attend an interview and talk about the factors they considered motivating. Caution was taken to include individuals from both the nursing students (n = 5) and the students of medicine (n = 5). Later, the responses of this group were used to construct the questionnaire items. Moreover, the same individuals were also involved in checking the validity and reliability of the questionnaire. The second group of participants were two external experts (n = 2) and faculty colleagues (n = 2) who reviewed the questionnaire items to ensure the content validity. The third group of participants included in the study consisted of 30 male (n = 15) and female (n = 15)
students among which a draft of the motivation questionnaire was distributed and checked for reliability and validity. Note that the students were selected because of their similarities with the target group. A group of three experts were also intensively involved in reviewing the items on the checklist and applying modifications based on the literature.

Finally, a group of 106 male and female nursing (n = 53) and medicine (n = 53) students participated in the study. The participants were first year university students who had enrolled in obligatory English classes which are part of the syllabus for the fulfilment of a degree in the University of Medical Sciences. What made these individuals good candidates for the purpose of the present study was the difference in English language proficiency and their obtained scores on tests of English conducted at the university. Students of medicine could be assigned 6–7 on an IELTS band while nursing students fall between 3 and 4 on the same scale.

2.2. Instruments
Using the literature as a guideline, we identified the underlying reasons for Iranian EFL motivation and put them together in the form of a checklist which was used for marking the students’ responses on the semi-structured interview (Appendix 1). Three external experts were asked to check the checklist and make sure that it covered and accurately represented the identified themes from the literature review. Further, the responses of the interviewees on the interview were recorded using a voice recorder since we aimed to eliminate resultant possible mistakes from marking the students’ responses on the checklist.

The study further favoured from a semi-structured interview which consisted of four questions. To avoid ambiguity and facilitate communication, the interview was performed in Persian and the learners’ responses were recorded with a voice recorder and scored on a checklist which had been previously designed based on the review of the literature. As to the credibility of the data obtained, we used member-checking and peer-reviewing. The former required the participants to review the checklist from the interview and listen to the recordings and ensure the correctness of the interpretations. Peer reviewing involved an external check of the research by a colleague provided with the checklist and transcriptions and required to re-conduct the interview with the same participants to confirm that the results were sensible and the data were plausible and correct.

Another instrument used in this study was a motivation questionnaire constructed by the researchers. The decision to base it on Dornyei’s Framework of L2 Self-System was because the identified themes from the qualitative phase of the study that underlie its development reflect the three major aspects of the model. More specifically, teacher characteristics, teaching material, test performance, and learning context can be grouped under the “learning experience” aspect since they consider the effects of the immediate learning environment. In the same way, social responsibility and instrumental motivation were categorized as reflecting properties of the Ought-to self-aspect. Finally as the name suggests, affection for the target language and immersion into the target language and culture were considered relevant to the ideal self-aspect. The questionnaire consists of 30 questions based on Likert-scale and the participants chose one of the following items: 1) strongly disagree; 2) disagree; 3) neutral; 4) agree; and 5) strongly agree (Appendix 2).

Two external experts and faculty members were asked to review the developed questionnaire for content validity. Moreover, the same students who had participated in the interview checked the questionnaire before it was distributed, confirming an accurate representation of the themes which were discussed in the interview. Then, the questionnaire was distributed among a group of 30 students similar to the target participants and the reliability and internal consistency of the instrument were confirmed using factor analysis and the calculation of the coefficient alpha for all the questions. Some items were omitted because they showed low factor loadings (less than 0.3) or loaded highly on more than one factor. Finally, we administered a 35-item questionnaire. The
Cronbach-alpha coefficient for the reliability of this questionnaire was estimated 0.856, which is high (Pallant, 2007).

In order to determine the level of the students’ English language proficiency, the researchers used a sample TOEFL test (Masan, 1983). Three skills of listening comprehension (with 3 parts and 40 items), structure and written expressions (with 2 parts and 40 items), and finally reading comprehension and vocabulary (with 2 parts and 60 items) were tested. The reliability of the test using Cronbach’s alpha was 0.95, which is considered high.

2.3. Data collection procedure
In the first phase of the study, the researchers reviewed the literature and identified the underlying motivating factors and created a checklist which was used to mark the students’ responses in the interview. In the next phase, the researchers interviewed 5 male and female students to become familiar with what they considered motivating for language learning. Using the students’ responses to the questions on the interview, we developed a 30 item five point Likert-scale questionnaire and assessed its reliability and validity. Then, the motivation questionnaire was distributed among 106 participants while they sat for their English final exams, aiming to assess the students’ level of motivation so that later comparisons could be made. The students were given sufficient time to respond to the questionnaire items. However, care was taken to prevent them from copying each other’s answers. Also, the we assured the subjects as to the confidentiality of their responses. In the final phase of the study, we gave a sample TOEFL test to determine the participants’ level of language proficiency and make sure that the students of medicine and nursing differed in terms of their English language proficiency. Further comparisons were made between the obtained score on the TOEFL test and the students’ performance on the mid-term and final exams.

2.4. Data analysis

2.4.1. Qualitative data analysis
In the first stage, we worked with the data, and organized and got familiar with them. Then, we codified the raw data through a process which is known as open or preliminary coding, through which we identified a wide range of concepts and categories about the motivating factors and then reduced them. In the next stage, i.e. axial coding, the data which had been previously broken down using open coding was put back together and connections between basic categories and subcategories were developed. Finally, using a procedure referred to as selective coding, we integrated some categories to create an overall model for motivating factors influencing Iranian learners. Finally, we obtained a model consisting of 8 major categories.

2.4.2. Quantitative data analysis
We performed two exploratory factor analyses through SPSS statistical software program to determine the factor structure of the questionnaire items for the nursing students and those who studied medicine. More specifically, exploratory factor analysis was employed to identify the underlying major categories or themes and to explore the underlying theoretical structure of the responses of the students to the questionnaire items. Based on the result of which different categories were identified. Moreover, descriptive statistics were used to compare the mean and standard deviation of the extracted underlying factors for the more motivated and less motivated learners. In other words, the descriptive statistics were used to identify the factors which were more influential on the level of the student’s motivation for the less motivated and more motivated language learners. These statistics also allowed us to compare the results of the present study in terms of the factors identified for the more motivated and less motivated learners with the findings of similar earlier studies.

3. Results
Teacher characteristics and behaviour were found to be a significant factor influencing the teaching and learning process related to language learning motivation (Dörnyei, 1994; Sakai & Kikuchi, 2009). Almost all of the interviewed participants in the present study believed that the teacher
accounts for their success or failure and admitted that their teachers had played an influential role in their decision to take their English classes seriously or not. They admitted that they could not even imagine how some teachers had contributed to their understanding and perception. Mention was also made of those teachers who simply had nothing to offer:

... I like the sort of English teacher who gives you something to take home to think about besides a headache. Alas that it rarely happens. I've only come across one or two at most ... the pricks [teachers] come into class empty minded, empty hearted ...

Others attributed their level of motivation to the absence or presence of power points, smart boards, and other teaching material in the classroom. They believed that running the English classes on traditional lines had consequences in the long run. One of the student’s response to a question about the teaching material in Iran reads as follows:

... I couldn't just make out what the teacher was writing on the board. The letters were either too small or illegible ... I kept cursing the people in charge who just never care. Isn't it time to open our eyes and see all the advances made in EFL/ESL classes around us? It's a pity ... a big, big shame ...

Some learners talked about their decisions for getting a scholarship as their main incentive for learning English. To this group, experiencing a new culture and travelling abroad, either for a short-term stay or migration mattered more than anything. They emphasised the prominent role English had in fulfilling their dreams. More fanciful others talked about how they liked English and fell in love with the English speaking countries, their cultures and their people:

Everyone's got a dream. Mine is to live in a context filled with the scent of the language [English]. I can readily hear the sound of my footsteps as I march on the soggy lanes of Cambridge on a foggy Christmas Eve ... God I wish I was there just now ...

However, others said that they liked to be a good representative of their country and culture. They asserted that everyone is born for a mission, and theirs was to tell others about their country and how lovely and interesting it is to be in the middle of a thousand year old civilization:

... the misconception about our people and country has existed for a while now. I like to change that by showing how peaceful, wise, and understanding we [Iranians] have been from the dawn of history ... tell me if there is any other better way than language [English] which gives me the chance of accomplishing what I am born to do. The world is waiting for a better me [I will become better by learning English] ...

Yet some of the learners believed that their level of motivation to test performance affected their performance and said that they felt most disappointed and unwilling to study English when they performed poorly on tests:

... it really hurts when you put all your eggs in the same basket but don't get what you expect or deserve [I study so hard for English tests but receive low scores]. I studied day and night for the G1 [general English one] exam last semester but eventually dropped it ... either there is something wrong with them [English tests] or with me ...

Using the students’ responses to the questions on the interview, we developed a rudimentary model of students’ motivation containing eight major categories or themes as follows:

1. Teacher characteristics
2. Teaching Material
3. Immigration into the target language and culture
4. Social responsibility
5. Affection for the target language
6. Test performance
7. Instrumental motivation
8. Learning context

The extracted themes were in the same line with Dornyei’s Framework of L2 Self-System. According to him, “possible selves represent the individuals’ ideas of what they might become, what they would like to become, and what they are afraid of becoming, and so provide a conceptual link between the self-concept and motivation” (Markus & Nurius, 1987: 157). Likewise, the student’s motivation in the present study was reflected in their type of selves. Put more specifically, the participants indicated their “‘ideal self’” through their intention for visiting another country (theme 3) and love for English (theme 5). They also showed their concern for the presence or absence of media or more innovative means of presenting material (theme 2), teacher characteristics (theme 1), failure or success on tests (theme 6), and learning context (theme 8), all of which being related to the “‘learning experience’” aspect in the self-system theory. Not surprisingly, the student’s motivation was not limited to these two aspects. Consistent with the findings of most studies carried out on motivation, instrumental motives (theme 7) and social responsibility (theme 4) were found to be significant in the student’s motivation, an indication for the “‘ought-to self’” aspect.

With the purpose of checking the appropriateness of the data for factor analysis, we calculated the determinants of the R-matrix, Bartlett’s test of sphericity (1954), and the Kaiser-Meyer-Olikin (1970, Kaiser & Rice (1974)) value, all supporting the factorability of the correlation matrix.

To answer the first research question on the motivating factor(s) for the Iranian ESP medical students, we first subjected the questionnaire items to a principle component factor analysis using a direct oblimin rotation procedure. On the basis of Kaisers criterion, the scree plot, and parallel analysis (Watkin, 1997), a three factor solution (with loadings above .50) was selected. The results are presented in Table 1.

Three items loaded on the first factor (8, 4 and 30). The items dealt with teacher characteristics and teaching material; therefore, the factor was labelled “Teacher characteristics and teaching material”. Likewise, three items loaded on the second factor, with the items on travelling to other countries and personal aspirations. Hence, the factor was named “immigration and personal aspirations”. The third factor was entitled “Instrumental motivation” because the items loading on it were related to individual development (items 16, 17 and 20)

We put these factors in the framework of the self-system model (Dornyei, 2005) which showed the presence of the two aspects of self-concept. An emphasis on the quality of teaching material, feelings for the teacher, and accompanying teaching by employing software and multimedia directs our attention to the importance of paying specific attention to the “‘immediate learning environment’” and its importance in the students’ overall motivation (Beaten et al, 2013). A further investigation of the extracted motivating factors, however, revealed that the immediate learning environment, despite its prominence, is not a sufficient condition for language learning motivation. Familiarity with the other intentions of language learners for learning a language, such as their desire to live in the target language context and understanding it influences their self-concept; therefore, motivation is a significant step in enhancing the level of the students’ motivation.

As with the other two previously discussed factors, instrumental motives are equally important in language learning. This factor is often attributed to the “‘ought-to self’” aspect and includes such factors as an indication of an individual’s sense of duty, obligations or responsibilities which might probably have not much resemblance to desires or wishes presented in the ideal-self aspect. But what is of importance is that “what can be regarded as the typical instantiation of the Ideal L2
Self can sometimes be understood as that of the Ought-to L2 Self, or vice versa (Kim, 2009, p.289). More specifically, in conceptualizing the ideal/ought self-distinction, the term “instrumentality” can be categorized into two distinct types (Dornyei, 2010). Although ideal self-guides have a promotion focus, concerning hopes, aspirations, advancements, growth and accomplishments (i.e. approaching a desired end-state), ought-to self-guides have preventive roles which regulate the absence or presence of negative outcomes, as to safety, responsibilities and obligations (i.e. avoidance of a feared end-state). Therefore, “‘when our idealized image is associated with being professionally successful, ‘instrumental motives with a promotion focus are related to the Ideal L2 Self. In contrast, instrumental motives with a prevention focus are part of the Ought-to L2 Self’” (Dörnyei, 2010 p. 79).

The identified “instrumental motivation” factor here consists of three items (16, 17, and 20) which reflect a professional/career advancement focus rather than a prevention focus. Based on the approach/avoid tendency drawn between the two dimensions, this factor can be attributed to the ideal-self aspect of self-systems. The participants described their future selves in terms of professional, technological, and economic development. Nevertheless, a case in point is the absence of the Ought-to self aspect. It appears as if the students of medicine were not much concerned with avoiding probable negative consequences. A possible explanation for this could be that since negative consequences are inherently dissolved in instrumental motives with a promotion focus, the students have not felt the need to voice them explicitly, the very fact that once more draws our attention to the interrelatedness of the three possible selves in the self systems theory.

The participants’ were categorized into two groups of more motivated (N = 27) and less motivated learners (N = 26). Those selecting “absolutely motivated” or “much motivated” were regarded as more motivated learners and those who chose “not much motivated” or “least motivated” were regarded as less motivated. (Figure 1)
As illustrated in Table 2, “Instrumental motivation” factor showed a higher mean than the other two factors. This suggests that directing the students’ attention to the attributes with a promoting function (ideal self) could lead to higher levels of motivation. One the other hand, the less motivated learners regarded the learning environment as a more motivating factor. These findings are in the same line with those of previous studies (Kormos & Csizér, 2008; Ryan, 2006, 2009; Csizér & Dörnyei, 2005a; 2005b; Csizér & Kormos, 2009; Dörnyei et al., 2006), which revealed the existence and dominant nature of the Ideal L2 Self. It seems likely that while the existence of the instrumental motives can never be totally ignored, it could be understood in terms of the ideal self in some language learning contexts.

To find the answer to the first research question on the motivating factors for Iranian medical ESP students, a factor analysis was run. However, before proceeding with the factor analysis, we assessed the suitability of the data for analysis and calculated the determinant of the R-matrix, Bartlett’s test of sphericity (1954), and the Kaiser (1970, 1974) value. The results supported the factorability of the correlation matrix. After the pre-analysis, a principle component factor analysis using a direct oblimin rotation procedure was applied to extract the possible factors. Based on the Kaisers criterion, the scree plot, and parallel analysis (Watkins, 1997), a two factor solution (with loadings above .50) was selected. Table 3 displays the pattern structure of the principle components analysis and the items loading on each factor.

According to the results of the factor analysis, we extracted two factors for the participants who studied nursing. The first factor was named “Intrinsic/integrative motivation” since the items loading (11, 15, 29) on it were related to these aspects. The second factor was termed “Learning environment” (3, 4 and 10). Viewed from a self-system perspective, the first factor is associated with the concept of “ideal self” and the second one to the “learning experience” concept. As in the case of the students of medicine discussed above, the findings here show the psychological wishes of the nursing students to fill in or decrease the gap between their current and future possible selves. They correlate with the previous available body of knowledge in that they showed that the notion of integrativeness tends to be just a part of the whole self-concept of the learner as a future...
The next identified factor was “learning environment” which, as mentioned elsewhere, is related to learning experiences in the self-system model. According to the theory, the teacher is one of the factors in the supportive language learning environment. The relationship between the language learner and the teacher has a great impact on the learning process. It is believed that the ideal L2 teacher self can impact the teachers’ favourable involvement in the teaching process. Mutual understanding or lack of it between the teacher and students may either direct the learning/teaching process in the appropriate direction or lead to a language learning environment which is of no or limited benefit to the teacher and students.

Another influential item which has also been identified as a source of motivation and demotivation in the traditional models of motivation is the “test score”. However, “test score” here is not limited to the instrumental motives discussed in earlier motivational models and has been broadened to include situational and non-situational variables. As stated repeatedly throughout the paper, the three aspects of the self systems model are at the same time separate and

### Table 2. Descriptive statistics for the extracted factors

<table>
<thead>
<tr>
<th>Factor</th>
<th>M</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Teacher characteristics &amp; Teaching Material (k = .3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More motivated</td>
<td>8.70</td>
<td>2.59</td>
<td>.054</td>
<td>-.189</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>Less motivated</td>
<td>9.34</td>
<td>3.28</td>
<td>.056</td>
<td>-1.16</td>
<td>4</td>
<td>15</td>
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<tr>
<td>Total (N = 53)</td>
<td>9.01</td>
<td>2.94</td>
<td>.131</td>
<td>-.762</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>2- Immigration &amp; personal aspirations (K = 3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More motivated</td>
<td>8.70</td>
<td>2.47</td>
<td>.366</td>
<td>-.587</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>Less motivated</td>
<td>8.03</td>
<td>1.98</td>
<td>-.850</td>
<td>.583</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Total (N = 53)</td>
<td>8.05</td>
<td>2.23</td>
<td>-.031</td>
<td>-.197</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>3- Instrumental motivation (k = 3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More motivated</td>
<td>9.22</td>
<td>2.08</td>
<td>.537</td>
<td>-.374</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>Less motivated</td>
<td>9.19</td>
<td>1.83</td>
<td>.030</td>
<td>-.020</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>Total (N = 53)</td>
<td>9.20</td>
<td>1.94</td>
<td>.331</td>
<td>-.269</td>
<td>5</td>
<td>13</td>
</tr>
</tbody>
</table>

### Table 3. Motivating factors for the nursing school students

<table>
<thead>
<tr>
<th>No</th>
<th>Items</th>
<th>F1</th>
<th>F2</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>I greatly became interested in English because I like its songs/music very much</td>
<td>-.672</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>I have special interests in language learning</td>
<td>-.651</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Fluency in oral English is an indicator of a good education and success</td>
<td>.517</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>My marks are influential on how much I invest myself in learning English.</td>
<td></td>
<td>.533</td>
</tr>
<tr>
<td>4</td>
<td>The effort I put into English learning largely depends on my feelings for the teacher.</td>
<td></td>
<td>.611</td>
</tr>
<tr>
<td>10</td>
<td>The teacher’s behaviour is very important for me.</td>
<td></td>
<td>.559</td>
</tr>
</tbody>
</table>
interrelated. At the surface level, higher marks and better performance on exams and tests enhance the level of the student’s motivation while poor performance may lower their motivational levels. At a deeper level, however, higher performance on language tests may be interpreted as the language learners’ intention to avoid negative consequences. In this sense of the word, test scores are reflected in the Ought-to self aspect of the self system theory and the interrelatedness of the system.

The students were further divided into two groups of more motivated (N = 20) and less motivated learners (N = 33) according to their responses to the question which we added to the end of the questionnaire. The individuals having chosen “absolutely motivated” or “much motivated” were considered as more motivated learners and the participants having chosen “not much motivated” or “least motivated” were regarded as less motivated. Figure 2 shows the means of the three factors for more and less motivated learners.

The results shown in Table 4 reveal that the mean for the “Intrinsic/Integrative motivation” and “Learning environment” factors are fairly similar in the more motivated and less motivated language learners. Further analysis of the findings showed that the two groups held similar perceptions in terms of the motivating factors they considered more motivating. Contrary to the available body of knowledge, while both the “ideal self” and “learning experience” concepts are influential on the mount of language learning motivation, it seems that the participants in the present study considered the latter as a more powerful indicator of their motivation. It seems likely that individuals with lower levels of language proficiency are not much bothered for developing a possible self which reflects their personal as well as social values and attach extra prominence to the immediate learning context.

4. Discussion
In simple terms, motivation refers to “the reasons underlying behaviour” (Guay et al., 2010, p. 712) or could be defined as the “the attribute that moves us to do or not to do something” (Broussard & Garrison, 2004, p. 106). A plethora of theories and models have been developed to account for the various factors underlying individual behaviour (Lai, 1999). While early approaches to motivation have focused on extrinsic reinforcement (Stipek, 1996), the problems
seen in these models led to the development of new models with different approaches to motivation (i.e. cognitive behaviour modification). More recently, Dornyei (2005) has developed a Motivational Self System Theory which shares some tenets from the possible selves’ theory (Makus & Nurius, 1986) and self-discrepancy theory (Higgins, 1996). Based on the model, the second language motivation of the language learners can be described based on the Ideal L2 Self, the Ought-to L2 Self and Learning Experience (Dörnyei, 2005). The present study was conducted to identify the possible motivating factors for the Iranian ESP language learners within a motivational self system theory and determine if the differences in the levels of language proficiency and motivation are reflected in the student’s type of self-concept and how.

Teacher characteristics and Teaching Material, Immigration and personal aspirations, and Instrumental motivation were the identified factors for the students of medicine. It is of interest to note that the immediate learning environment, despite its prominence, was not a sufficient condition for language learning motivation here. Moreover, the identified “instrumental motivation” factor reflected a professional/career advancement focus rather than a prevention focus. Two factors, i.e. Intrinsic/Integrative Motivation and Learning environment, were identified as the motivating factors for the students of nursing. Similar to the students of medicine discussed above, the findings here with respect to the intrinsic/integrative motivation factor point out that the nursing students’ psychological wishes to fill in or reduce the gap between their present and future possible selves was a factor that motivated them. Integrative and intrinsic motivation is a well-established topic in ESL and EFL language learning and many researchers have carried out studies on it with respect to language learning (e.g. 2001; Dörnyei, 1990, 2006; Gottfried, 1990; Lange & Adler, 1997; Noels et al., 2001). Despite some similarities, however, integrative and intrinsic motivations are understood quite differently in the framework of a self-system theory. In more traditional models, intrinsic motivation has been defined as “the type of motivation that is animated by personal enjoyment, interest, or pleasure”. (Vural, 2013 p. 16). The motivational self-system theory moves away from this definition and perceives the gap between an individual’s current and future selves as a motivating factor. This pattern was well observed in the present study where the students indicated their desire for learning English through their interest in its songs/music and assuming fluent oral English as representative of a good education and success.

5. Conclusion
Therefore, in line with Stipek, Feiler, Daniels, and Milburn (1995), teacher’s warmth represented as teacher acceptance and nurturance was identified as a contributing factor to motivation. Moreover, the teacher was identified as the most important component of a language learning

| Table 4. Descriptive statistics for the extracted factors |
|----------------|-----|-----|-----------|-----------|-----|-----|
| Factor         | M   | SD  | Skewness | Kurtosis  | Min | Max |
| 1- Intrinsic/Integrative motivation (k = .3) |
| More motivated | 4.50| 1.90| .710      | −1.34     | 3   | 8   |
| Less motivated | 4.66| 1.93| .645      | −1.08     | 3   | 9   |
| Total (N = 53) | 4.60| 1.90| .649      | −1.171    | 3   | 9   |
| 2- Learning environment (K = 3) |
| More motivated | 6.40| 1.53| 1.46      | .289      | 5   | 11  |
| Less motivated | 6.66| 1.97| .807      | −.690     | 4   | 11  |
| Total (N = 53) | 6.56| 1.81| .985      | −.012     | 4   | 11  |
environment which is supportive. To be more specific, the relationship created between the language learner and teacher has an important effect on the learning process.

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References
### Appendix 1.

<table>
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<tr>
<td>Gender:</td>
</tr>
<tr>
<td>Course:</td>
</tr>
<tr>
<td>Positive attitudes towards the target language country.</td>
</tr>
<tr>
<td>Positive feelings towards the target language.</td>
</tr>
<tr>
<td>Positive feelings towards the target language people.</td>
</tr>
<tr>
<td>Positive feelings towards the target language culture.</td>
</tr>
<tr>
<td>Positive attitudes towards the …</td>
</tr>
<tr>
<td>Short-term stay (Visiting)</td>
</tr>
<tr>
<td>Long-term stay (integration &amp; assimilation)</td>
</tr>
<tr>
<td>Getting a better job</td>
</tr>
<tr>
<td>Getting a better education</td>
</tr>
<tr>
<td>Obtaining reward</td>
</tr>
<tr>
<td>Obtaining Approval</td>
</tr>
<tr>
<td>Teaching method</td>
</tr>
<tr>
<td>Learning Material (books, software, multimedia, tablets, smart boards, PowerPoint) are important</td>
</tr>
<tr>
<td>Teachers characteristics</td>
</tr>
<tr>
<td>Teachers behaviour</td>
</tr>
<tr>
<td>Feelings towards the teacher</td>
</tr>
<tr>
<td>The Syllabus</td>
</tr>
<tr>
<td>The Learners</td>
</tr>
<tr>
<td>Time of the class</td>
</tr>
<tr>
<td>Place of the class</td>
</tr>
<tr>
<td>Class environment/atmosphere</td>
</tr>
<tr>
<td>Absence or presence of punishment</td>
</tr>
<tr>
<td>Individual development</td>
</tr>
<tr>
<td>Academic improvement</td>
</tr>
<tr>
<td>Job improvement</td>
</tr>
<tr>
<td>Opportunistic improvement</td>
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<tr>
<td>Self-recognition</td>
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<tr>
<td>Informative function</td>
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<tr>
<td>Reading books</td>
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<td>Reading papers/Journals/magazines</td>
</tr>
<tr>
<td>Surfing the net</td>
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<tr>
<td>Watching documentaries/movies</td>
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<tr>
<td>Listening to audio files/music</td>
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<td>Using the computer</td>
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<tr>
<td>Showing off</td>
</tr>
<tr>
<td>Feeling better</td>
</tr>
<tr>
<td>Presence or absence of homework</td>
</tr>
</tbody>
</table>
Appendix 2. Motivation questionnaire

| 1. | My parents and school pushed me into learning English. |
| 2. | I’ve always liked English without any particular reason. |
| 3. | My marks are influential on how much I invest myself in learning English. |
| 4. | The effort I put into English learning largely depends on my feelings for the teacher. |
| 5. | The effort I put into English learning largely depends on the quality of English classes. |
| 6. | I am in desperate need of learning English because I want to receive a university degree. |
| 7. | English learning provides me with the opportunity for career development. |
| 8. | The effort I put into English learning largely depends on the quality of materials available in the classroom. |
| 9. | English learning gives me the chance of leaving the country. |
| 10. | My attempts as to English learning depended to a large extent on the self-access sessions being programmed in a comfortable schedule for me. |
| 11. | For me, learning the English language is of importance because it is very useful in contemporary society. |
| 12. | I have special interests in language learning. |
| 13. | I learn English in order to help me to learn other academic subjects. |
| 14. | I intend to have a prestigious-high paid job which is impossible without learning English. |
| 15. | I intend to learn English to live in an English speaking country. |
| 16. | I learn English because I am interested in English speaking peoples and their cultures. |
| 17. | I learn English so that I can catch up with economic and technological advancements in the world. |
| 18. | I good command of English enables me to contribute to my country’s prosperity. |
| 19. | Learning English gives me the chance to go abroad and experience English-speaking cultures. |
| 20. | I learn English just because I like/appreciate it. |
| 21. | I learn English in order to let the people in the world know more about my country. |
| 22. | I greatly became interested in English because I like its literature very much. |
| 23. | Learning English can give me a sense of success |
| 24. | I can meet the expectations of my family if I have a good command of English. |
| 25. | I learn English since I undergo better education and find job opportunities abroad. |
| 26. | I greatly became interested in English because I like its songs/music very much. |
| 27. | Having access to extra resources such as videos, recarding and other multimdia is an advantage for learning English in a self-access centre. |
| 28. | Acquisition of good English skills has a great effect on an individual’s success in life. |
| 29. | Fluent oral English is an indicator of a good education and success |
| 30. | Using software and multimedia resources for learning English is important |