

ESP TARGET SITUATION NEEDS ANALYSIS: THE ENGLISH LANGUAGE
COMMUNICATIVE NEEDS AS PERCEIVED BY HEALTH PROFESSIONALS IN THE
RIYADH AREA

by

MAJID ALHARBY

(Under the Direction of Linda Harklau)

ABSTRACT

Although the ESP approach is widely used in English language programs in Saudi Arabia, few applications have been conducted to customize ESP courses to suit the Saudi work environment. The medical field represents this challenge since English is used as the tool of communication in the Saudi medical field.

The purpose of this study was to investigate the English language communicative needs of health professionals in the Riyadh area by investigating their language use in the workplace in order to provide empirical data serving Saudi ESP context.

The study used the framework of needs analysis to investigate the extent of English use in the careers of medical professionals, the required level of the reading, writing, listening and speaking skills in different activities, and the perception of health professionals towards their English language preparation during their previous college study.

A questionnaire was constructed and distributed to three different hospitals in the Riyadh area representing five different medical sites. The sample population consisted of health professionals representing physicians, dentists, pharmacists, and applied medical technicians. 787 questionnaires were distributed. Out of these 787 questionnaires, 259 came back representing a response rate of 32.9%. Out of the 259 received questionnaires, 34 were disregarded due to incomplete answers or non qualified respondents. This brought the total number of usable forms to 225 questionnaires. The questionnaire consisted of 22 items and 20 sub-items. For each item and sub-item, frequency and percentage were calculated using the SPSS statistical package.

The findings of the study indicated that the English language is used extensively at the workplace and plays an important role in the careers of health professionals. However, physicians and dentists used English more often than pharmacists and applied medical specialists. The findings also indicated that the receptive skills (e.g. reading and listening) were perceived as more important than the productive skills (speaking and writing). However, the differences in percentages between receptive skills and productive skills were too close to make an affirmative judgment. Finally, the findings revealed that the English language courses that health professionals took at the college level were inadequate in relating the English language use to their medical needs.

INDEX WORDS: Linguistics, Second Language Acquisition, Applied Linguistics, TESOL, English for Specific Purposes, Language Use, Communicative Competence, Needs Analysis, Needs Assessment, Target Needs Analysis.

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A Dissertation Submitted to the Graduate Faculty of The University of Georgia in Partial
Fulfillment of the Requirements for the Degree

DOCTOR OF PHILOSOPHY

ATHENS, GEORGIA

2005

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DEDICATION

*to my parents
for their unconditional love and support*

ACKNOWLEDGEMENTS

First and foremost, I would like to thank Allah for his help and guidance throughout my life. My gratitude is extended to my parents for their continuous prayers, encouragement, and patience. My thanks also go to my sisters for their encouragement and support. I am especially grateful to my brother Samir who not only helped me in conducting the pilot study of this dissertation but also acted on my behalf socially and financially in different tasks in Saudi Arabia while I was pursuing my graduate studies in the United States.

My deepest love and appreciation go to my dear wife who not only helped me in preparing materials and statistics for this study, but also carried most of the burden in raising our children. I am also grateful for my children who provided me with a continuous source of inspiration and joy.

I would also like to express my greatest gratitude to my major professor and the head of my dissertation committee Dr. Linda Harklau who provided me with support and encouragement throughout my study at the University of Georgia. Her academic advice and meticulous revisions provided me with guidance during all phases of this dissertation. I would also like to thank the other members of my dissertation committee; Dr. Betsy Rymes, Dr. Melisa Cahnmann, and Dr. Joseph Wisenbaker for serving in my committee and sharing their expertise with me.

Sincere gratitude goes to my colleague and friend Khalid Alshaya who distributed and collected the questionnaires in Riyadh along with preparing the necessary paper work to do so. I am in debt to him for his kindness and assistance.

Finally, I would like to thank my beloved country Saudi Arabia for the scholarship that enabled me to continue my graduate studies in the United States.

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CHAPTER ONE

INTRODUCTION

English is the only foreign language taught in public schools in Saudi Arabia. Students take English language courses for six years, from seventh grade until they graduate from high school. Just recently (the school year of 2004) the government introduced the English language even earlier, to elementary schools. Nevertheless, most Saudi students consider English as a course to pass rather than a tool to use in their future careers. Almulhim (2001) indicates that most Saudi students regard English as unimportant for two reasons. First, English is not used in the students' daily life activities outside the classroom. Second, English belongs to a foreign culture that they have little or no exposure to. As a result, most students pass the English language requirement by memorizing vocabulary and mechanical grammar drills.

In order to deal with the resulting lack of English proficiency in many university students, Saudi universities established different facilities to teach English language courses. For example, the College of Languages and Translation in King Saud University established a facility called the Language Unit. This Language Unit is responsible for teaching English language courses to students of other colleges.

In recent years an increasing number of English language programs in Saudi Arabia have adopted an English for Specific Purposes (ESP) approach in their English language courses. The purpose of these programs is to provide students with an English language knowledge that enables them to join the workforce. The Report of Curriculum Development (1998) indicates that

the lack of the English language ability prevents many young Saudi graduates from conducting their jobs effectively. This causes many companies and work facilities to avoid hiring young Saudi graduates in different fields of work. To overcome this problem, many institutions are providing ESP courses at the college level for students from different specialties to enable them to conduct their future careers effectively. However, there is a need for research to customize ESP courses to suit the Saudi work environment. Educators and ESP practitioners in Saudi Arabia are seeking applications of the ESP approach to serve different language programs designed for different specialties. What is available now mostly consists of the theoretical framework of the ESP approach with different applications conducted outside Saudi Arabia.

The medical field in Saudi Arabia relies on these programs to qualify Saudis in terms of their language proficiency. However, customizing ESP programs to suit the Saudi work environment falls short in defining the ESP objectives since there has never been a study conducted to define the English needs of Saudi medical professionals that might serve as the basis for an ESP curriculum. At present, instructors introduce the ESP program for the English language courses simply by selecting materials from available commercial texts for teaching English for medical purposes along with material designed for teaching English for general use or collecting different materials in a handout. Therefore, the purpose of this study is to investigate the English language communicative needs of health professionals in the Riyadh area in order to provide empirical data serving the ESP context of Saudi education

Statement of the Problem

To date, there has been no empirical investigation of the communicative needs of Saudi health professionals in the workplace. Therefore, teaching English for medical purposes is far

from satisfactory in terms of customizing ESP courses by using the language situation at the work place as the input to feed ESP courses. When the specific language needs are not defined based on language use, learners will end up disappointed with the language proficiency level that they achieve once they join the work force, regardless of the effort that they put into their language training. On the other hand, the effort of administrators and English language teachers would lack focus if the language needs are not defined in terms of language use.

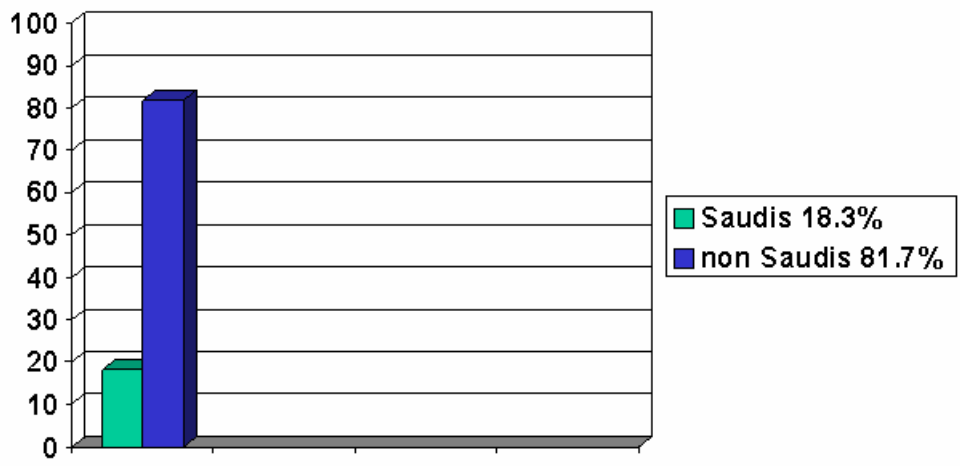
In order to contribute empirical data to the ESP context in Saudi education, this study investigates the English language communicative needs of a targeted group of learners in medical fields by investigating their targeted needs in the workplace.

The language situation in the three hospitals in this study reflects the need for Saudi professionals to have a high level of proficiency in the English language since they deal with a large number of English speaking employees in the workplace. Chart 1.1 shows the percentage of Saudi employees to non- Saudi employees at the targeted hospitals.

More than 80% of the employees are non Saudis who use English as their tool of communication. Moreover, English has become the world dominant language of medicine and technology (Crystal, 2003). The English language has therefore become crucial to health professionals.

The hope of this study is to provide empirical information about the uses of English in the medical field which, in return, can be used as an input to feed the larger structure of the ESP context in language training.

Hospitals' employees
chart 1.1



Research Questions

- 1- To what extent is the English language used in the careers of medical professionals at hospitals in the Riyadh area?
 - a. What is the perceived percentage of using English in the workplace?
 - b. Does medical training require the usage of English?
 - c. Does communication with other employees require the usage of English?
 - d. Do health professionals perceive English as an important tool for communication?

- 2- What level of the reading, writing, listening and speaking skills of the English language are required in the workplace and for performing what kind of activities?
 - a. Which of the skills (reading, writing, listening, and speaking) is more emphasized in the workplace?
 - b. What kind of activities are these skills used for?

- 3- Do graduates of the medical colleges feel that they were prepared in terms of their English language ability to meet their current communication needs?
 - a. How do health professionals perceive their English language ability before and after college?
 - b. Are the English language courses at college relevant to the activities performed in the workplace?
 - c. Do health professionals feel that the English language courses at the college level are based on medical English?

Significance of the Study

This study will provide empirical data for ESP programs intended for the medical field. ESP practitioners can benefit from this study in different areas of Saudi education and in medical education in EFL contexts. ESP researchers and practitioners can benefit from this investigation by comparing and contrasting the language situation in this study with other ESP applications around the world. This study also contributes to our understanding of how English is used in international workplace settings as a foreign language or lingua franca.

CHAPTER TWO

LITERATURE REVIEW

This review consists of five parts. The first part gives an overview about the origins of the ESP approach as a result of the growing global phenomenon of English in scientific and technical communication. The second part discusses the theoretical background of needs analysis as the framework of the ESP approach, its relation to the concept of communicative competence, and its impact on linguistic theory. The third part discusses different definitions of needs analysis. The fourth part illustrates various models of needs analysis within the ESP context. The last part of the literature review describes related studies conducted within the framework of needs analysis in the ESP context.

Overview

The ESP approach originated to fulfill the demand by many learners around the world who needed to learn English to have access to science, technology and economical resources. The English language has achieved a global status. Many countries give English a special role in their communities. Some of these countries, particularly in post colonial contexts, give English the status of an official language (e.g. Nigeria, Singapore etc.) where English is the medium of communication in government, law courts, media, and the educational system (Brutt-Griffler, 2002). Other countries assign a priority role to English where it is taught as a second or a foreign language. Graddol (1996) indicates that a quarter of the world's population is fluent or

competent in English and no other language in the world today can match the steadily growing spread of the English language.

What gives the English language this status is not its linguistic system. Rather, Crystal (2003) argues that the current status of English results from the power of the people speaking it. Therefore, the global power of the English language is related to the historic political, cultural, socio-economic and technological dominance of England and the United States. Other languages throughout history such as Greek, Arabic, Spanish and many others had held similar positions as world languages of commerce and scholarship.

Nationalists in different places of the world often resist the spread of the power code. This resistance is exemplified in the post colonial era by those who refuse to use the language of their former colonial power in order to promote the indigenous language to emphasize their indigenous identity. For example, Ngugi wa Thiong'o (1986), a Kenyan writer who refuses to use English in his work, argues that colonial languages impose cultural aspects on the indigenous language leading to a distorting of the local identity.

World English can be argued to be shaped through linguistic imperialism where the spread of English is viewed as language imposition (Phillipson, 1992). However, learning English can also be seen as an investment. The technological revolution in today's digital world and the way people are using the Internet make English emerge as a global medium of communication. The revolution in communication extends cultural interaction between people beyond their local speech communities (Warschauer, 1999). Three quarters of the world's emails are currently in English and 90% of the materials on the Internet are in English (Crystal 2003). Resistance to English can not stop the spread of the English language simply because alternative solutions such as translation are expensive and impractical. Many countries thus believe that

learning another language is a source of development. Choosing a foreign language to be taught in schools depends on what people would gain from this investment. For example, in 1996 Algeria, a former French colony, replaced French with English as the chief foreign language in schools reflecting the demand for English as a key for development. Learning English is viewed as an investment to enable people to access the resources represented by the English language. This concept of language investment views the exposure of learners to a new language as adding a new discourse to the primary one rather than imposing a superior code. Norton (2000) indicates that when people speak a language, they are investing in an identity as speakers of that language. Learners invest in a second language in the hopes of gaining access to resources such as education, friendship, and money. The degree of L2 learning is a reflection of the degree of investment (Norton, 1995).

In other words, L2 learners need to deal with discourses from different languages in order to fulfill their communicative needs. This process gives them a choice to expand their previous discourses to include new ones. This bilingual standpoint enables L2 learners to contribute different aspects from their L1 to the English language in a process leading to the use of English as a *lingua franca*.

For a language to be used as a *lingua franca*, different bilingual groups of people need first to accept this language as their shared tool of communication. Since English has become a global language with different varieties world wide, no one now can claim ownership of the English language. English has developed in different varieties representing different linguistic contributions from different languages representing different ethnic groups. This phenomenon of world English is described as a second language acquisition by speech communities (Brutt-Griffler, 2002). The world English situation has enabled the English language to become a *lingua*

franca of the world. On a global level, people from different countries are using English as the lingua franca of communication since it provides access to knowledge and business. On a regional level, English is also used as a lingua franca among different ethnicities within one country. In India, for example, English is the L2 language for different ethnicities and it is used as the tool of communication. The expansion in India's population and its multiethnic society created an Indian English variety of the language. There are more L2 speakers of English in India than L1 speakers of English in England (Crystal 2002). On a smaller scale, English is being used as a lingua franca in many small language communities.

The language situation of Saudi medicine is an example of lingua franca communication. The community of health professionals in Saudi Arabia includes a large number of non-Saudis. In fact, the majority of health workers in Saudi Arabia come from other countries. In this multilingual context English is often the tool of communication. Saudis also have competence in English as a result of their English medium language training at the college level. Non-Saudis are hired not only for their medical qualifications but also for their ability to communicate in English. As a result, English has become a natural choice as the lingua franca for communication.

Theoretical Background

English for Specific Purposes (ESP) is a branch of applied linguistics that focuses on relating the teaching and learning process to learners' needs. Widdowson (1981), a linguist and an early pioneer of the approach, describes the general concept of ESP by stating that "if a group of learners' needs for a language can be accurately specified, then this specification can be used to determine the content of a language program that will meet these needs." The difference

between ESP and general English is not a matter of the “existence” of a need; it is rather the “awareness” of a need. A child at a school might have a simple need to pass an exam. However, what influences the content of a language course is the awareness of a need. Hutchinson & Waters (1992) argue that if learners, sponsors, and teachers know why learners need English, that awareness will have an influence on what will be accepted as reasonable content in the language course and what potential can be exploited. The ESP approach uses the needs analysis framework as the main tool to define learners’ needs in a specific field because the awareness is more recognizable in a specific target situation representing a “real-life-situation”.

The ESP approach represents a shift in focus from a Chomskyan influenced register analysis to needs analysis. Previously, language needs had been based on formal linguistics categories focused theoretically on creating a register to develop a special language for a certain group of learners. This method is called register analysis and is based on the principle that different groups of learners require different lexical and grammatical rules to learn English (Hutchinson & Waters, 1992). For example English for engineers requires a special register that includes the most common grammatical and lexical features used in their field.

Hymes’ (1972) formulation of communicative competence had a major impact on linguistic theory, leading theories to develop in a new direction. Hymes (1972) criticized Chomsky’s restricted view concerning the notion of competence and performance. Chomsky had introduced the concept of competence (e.g. speakers’ grammatical knowledge of their language) and performance (e.g. the actual production of language as an imperfect image of competence) to propose the existence of innate properties of language which he considered to be the central force guiding language acquisition. Though Hymes adopts Chomsky’s distinction between competence and performance, he points out that Chomsky’s notion of competence is too

restrictive and does not take into account underlying rules of performance (e.g. Chomsky's concept of competence does not deal with the interpersonal aspect of language in relation to the social context). Hymes considers the underlying rules of performance to be part of competence and thus he proposes a wider view of competence. Hymes points out that the Chomskyan restriction of the concept of competence to the perfect knowledge of an ideal speaker-listener, in a homogeneous speech community, unaffected by sociocultural constraints, cannot account for the communicative function of language. It only accounts for the grammatical competence of language. Thus, Hymes proposed that the definition of competence has to be revised to include four categories; knowledge of grammar and vocabulary (e.g. grammatical competence), knowledge of rules of speaking (e.g. knowing how to begin and end a conversation, knowing what topic to talk about in different types of speech events, and knowing which address forms may be used in different situations), knowing how to use different forms of speech act (e.g. request, apology, invitation etc), and knowing how to use language appropriately (Hymes 1972; Savignon, 1997). Hymes proposed the term "communicative competence" for this concept to account for the social dimension of language acquisition. He bases his proposal on both psycholinguistic and sociolinguistic notions of language acquisition. Thus, communicative competence represents grammatical competence as well as sociolinguistic competence.

This new direction in linguistic theory influenced the SLA field to adopt a communicative approach in language teaching (Brown, 1991). The shift in focus in second language acquisition theory from language structure to language use led advocates of the communicative approach to point out that register analysis leads learners to memorize certain vocabulary and grammatical forms and neglects the communicative use of language. This concern about the communicative properties of language use shifted the way that researchers

viewed learners' needs. From this new standpoint, language teaching is viewed as a process of analyzing the communicative needs of learners in order to determine what the learners need to do with the language. As a result of this new trend, needs analysis emerged in the field of ESP as the main research methodology to provide a detailed analysis of language situations in language use. Instead of looking at linguistic structures and lexicons as the source to design ESP courses, as is the case in register analysis, needs analysis aims to design ESP courses based on detailed empirical analysis of language situations in actual language use.

In needs analysis, the goal of language teaching is seen through the communicative competence that can best serve the needs of the learner. In this regard, needs analysis has an association with the notional-functional approach where activities are aimed at achieving two goals. First, the meanings and concepts the learner needs in order to communicate (e.g. time, quantity, duration, location) and the language needed to express them. These concepts and meanings are called notions. Second, the language needed to express different functions or speech acts (e.g. requesting, suggesting, promising, describing) in language situations (Richards, Platt, and Weber, 1985, p. 196).

However, the profile of needs analysis serves a targeted group of learners while the notional-functional approach serves a wider group of learners sharing overlapping categories of needs. Munby (1978) indicates that the selection of instructional materials in needs analysis is based on a systematic analysis of specific learners' needs for the target language by analyzing the following:

- 1- reasons for learning
- 2- place and time of anticipated target use
- 3- others with whom the user will interact

- 4- content areas (activities involved)
- 5- skills (listening, speaking, reading, writing, translation, etc)
- 6- level of proficiency required

On the other hand, the notional-functional approach aims at what a learner of a particular language needs to do and say independently in a foreign language environment. The aim is to teach languages to the most general and vague of audiences (van Ek, 1975). Thus, the analysis focuses on broader concepts of meaning such as the social purpose of the utterance and categories of communicative function.

Based on the notion of communicative competence, needs analysis discovers and describes language needs by using an analysis of a linguistic practice which characterizes the target situation within a discourse community (Weddle and Van Duzer, 1997). It is the first step in viewing language learning through a broader concept of the learning process. When the curriculum content, materials, and teaching approaches match learners' perceived and actual needs, learners' motivation and success are enhanced. Therefore, SLA is promoted (Weddle and Van Duzer, 1997). Needs analysis as a framework provides an empirical basis for course design that sets up a suitable environment to promote SLA. Needs analysis relates communicative competence development to the materials and activities used in the classroom. Hall (2001) indicates that the first step in designing instruction for the communicative approach to language teaching is to conduct a needs analysis. Thus, needs analysis aims at identifying the particular communicative activities that a particular group of learners is expected to participate in as users of the target language. Providing this kind of communicative activity will help to promote learners' communicative competence.

Robinson (1991) indicates that by taking into account the target needs and the present needs of competence, a model of needs analysis is built on the concept of communicative competence. West (1994) argues that a model of needs analysis would be a study of interlanguage, error analysis, and diagnostic testing. The point to make in this regard is that needs analysis can be looked at from an SLA prospective as a diagnostic tool of the interlanguage development of the target group of learners by linking their English language proficiency with the communicative function of language in the target situation. When defining the goals of SLA, Ellis (1997) indicates that one of the goals of SLA is to improve language teaching. The area of language use in SLA provides the theoretical basis for the ESP process (Nunan 1988 a).

In conclusion, the impact of the communicative competence theory and the social function of language on the ESP field demanded a shift in focus from the language system to language use. This shift in focus paved the way for needs analysis to emerge as a main source for providing empirical data to design activities for a certain group of learners based on their language use. The outcome of this shift provides data to develop second language communicative competence in a specific field.

Definitions of Needs Analysis

Brown (1995) identifies the term needs analysis (also called needs assessment) as the activities involved in gathering information that will serve as the basis for developing a curriculum which meet the learning needs of a particular group of students. In language programs, the needs are language related. Once identified, needs can be stated in terms of goals and objectives which, in turn, can serve as the bases for developing tests, materials, teaching

activities, and evaluation strategies. The purpose is to fill the “gap” of what a language program “lacks.” This definition draws a line between needs analysis and evaluation. Needs analysis aims at determining the needs for a defined group of people, while an evaluation determines to what extent a program meets these needs. Furthermore, Soriano (1995) indicates that needs analysis collects and analyzes data to determine what learners “want” and “need” to learn, while an evaluation measures the effectiveness of a program to meet the needs of the learners.

Hutchinson & Waters (1992) define needs analysis on the basis of “necessities” and “wants” in order to classify between what the learners have to know and what the learners feel they need to know. The focus here is on the “lacks” that represent the gap between the required proficiency in the target situation and the existing proficiency of the learners. This definition views language needs as a process of negotiation between the learners and their society.

Witkin and Altschuld (1995) define needs analysis as a systematic set of procedures undertaken for the purpose of setting priorities and making decisions about programs or organizational improvement and allocation of resources. According to this definition, needs analysis should fill the “gap” of needs between the current state of affairs and the desired state of affairs.

The above definitions base their concept of needs analysis around the terms “necessities,” “lacks,” “wants,” and “gaps.” However, all these terms have different interpretations from one individual to another. Therefore, linguists in the ESP field have not agreed exactly on the definition of the term “needs” itself. West (1994) comments on this issue by indicating that the term “needs” lacks a unified definition and remains ambiguous. Richards (2001) argues that the definition of “needs” depends on the perception of those making the judgment. Different interests and values are reflected in the definition. Teachers, learners, administrators, employees,

parents, and stakeholders may all have different views as to what needs are. Accordingly, the difference between what learners can presently do with the language and what they should be able to do can not be looked at from one standpoint. Braine (2001) indicates that linguists disagree on the definition, but they all agree that there are external factors that influence the definition. Factors such as staffing, time, and cultural attitudes should be taken into consideration when conducting needs analysis.

Needs Analysis Models

Different models under the ESP umbrella have approached this field in different ways. Jordan (1994) indicates that the main two approaches in needs analysis are the Target-Situation Analysis and the Present-Situation Analysis. Other approaches such as the Learning-Centered approach, the Strategy Analysis approach, and the Means Analysis approach are seen as permutations of Target-Situation Analysis and Present-Situation Analysis (Jordan, 1994).

The Target-Situation Analysis model started with Munby's (1978) model of the Communication Needs Process. This model contains a detailed set of procedures for discovering target situation needs. It is based on analyzing language communication in the target situation in order to provide a communicative needs profile for a specified group of learners. The Communication Needs Process profile seeks to present a valid specification of the skills and linguistic forms that a group of learners needs in the intended target situation. The Communication Needs Process model contained nine components (e.g. participant, purposive domain, setting, interaction, instrumentality, dialect, target level, communicative event, and communicative key). Each component asks questions about the use of the target language in order to identify learners' real world communicative requirements. The outcome is used as an

input to prepare the intended group of learners for their intended use of the target language through converting the needs profile into a communicative competence specification that is presented in a form of a syllabus (Jordan, 1997).

Tarone & Yule (1989) continued research within the same framework of the Target-Situation Analysis approach. However, they added four components to Munby's model. Their addition consisted of the global level (e.g. situations, participants, communicative purpose, and target activities), the rhetorical level (e.g. organisational structure of the communicative activities), the grammatical-rhetorical level (e.g. linguistic forms required to realise the forms in the rhetorical level) and the grammatical level (the frequency of grammatical and lexical constructions in the target situation). These additional levels were adopted from Canale and Swain's (1980) model of communicative competence (e.g. discourse competence). The purpose of adding these levels are to show how needs analysis incorporates linguistic form (e.g. register analysis) and functional form (e.g. discourse analysis). Both forms are layers in the target and present situations that provide input data for syllabus design (West 1994).

The Target-Situation Analysis model has remained highly influential in the field of ESL/ESP needs analysis. It was the first needs analysis model based on the concept of communicative competence. Munby's categories of communicative activities and their relation to the communicative events of the target situation reflect categories of real world language use (West, 1994). In other words, they reflect the shift in the ESL field from language system to language use. As a result of this shift, most studies continue to follow this model in relating communicative needs to analysis of communication in the target situation. Consequently, needs analysis has become an integral element of the field of ESP as the basis for designing ESP courses (Dudley-Evans, 1991). However, this approach has received major criticism for being

inflexible. The initial Target-Situation Analysis model by Munby was comprehensive and complex because his aim was to provide a wide range of needs profiles. However, he did not specify any priorities for his model of activities. This creates difficulties when applying the profile to different language situations (West, 1994). Practitioners overcome this difficulty by using different profiles based on their own circumstances.

It is important here to note that this model analyzes the four skills (listening, speaking, reading, and writing) in various job-related activities in terms of receptive and productive skills leading to generate a general profile of the language situation to be used as an input in course design (Jordan, 1997). In language teaching, the provided information guides the teaching process in the classroom to set the priorities in scaling the communicative modes where the interpersonal mode links the receptive and productive skills, the interpretive mode relies on receptive skills, and the presentational mode relies on productive skills (Brecht & Walton 1995).

The second major model in needs analysis is the Present-Situation Analysis proposed by Richterich and Chancerel (1980). In this approach the information to define needs is drawn from a wide range of sources: the students, the teaching establishment, and the place of work (Jordan 1997). Since the sources of data collection are multiple, this model provides detailed guidelines and techniques about the kind of information to be included. The aim is to seek information about levels of ability, available curricula, teaching methods, resources, views on language teaching and learning, surrounding society, and cultural elements. This model was developed under the supervision of the Council of Europe to identify and define the needs of European adult learners in a comprehensive model that can be applied to all the member states of the European Council. The main drawback of this model is that it requires a team of specialists to be

conducted. Another drawback is the excessive use of generalizations in order to cover a profile from different countries.

The Target-Situation Analysis and the Present-Situation Analysis are the two landmarks in needs analysis studies. Researchers continue to use one of these models as their theoretical base depending on the circumstances of the conducted research.

This study adapted a similar theoretical base to the Target-Situation Analysis approach since it is more appropriate for the objectives of the study, the size of the sample population, and the available resources.

Research Studies in Needs Analysis

Typically, needs analysis is done on language programs serving adults in academic and professional programs. The following overview provides a sampling of recent studies in needs analysis conducted in different parts of the world. This overview will first present studies conducted within the field of medical English and then present other studies in English for specific purposes.

Eggy (1999) conducted a needs analysis to investigate the relationship between English language proficiency and medical residency success in the United States. Twenty International internal medicine residents at Wayne State University in Michigan were first evaluated for English ability by the Test of English for International Communication. Then, a questionnaire was administered for these students. Although the participants scored high grades in the Test of English for International Communication, language skills were identified in the questionnaires as the primary weakness. The findings indicate that medical knowledge was not linked to English

ability. The study concluded that a training course in English for medical purposes was recommended.

Bosher (2002) conducted a needs analysis study to determine why many ESL students enrolled in a nursing program were not succeeding academically. Interviews, observations, and questionnaires were used to gather information about the objective needs of students. The findings indicated that communicating with clients and colleagues in the clinical setting was perceived as the greatest difficulty. Based on the needs analysis, a course on Speaking and Listening in a Health-Care Setting was developed to respond to what was identified as students' area of greatest difficulty. The content of the course was divided into four units: assertiveness skills, therapeutic communication, information-gathering techniques, and the role of culture in health-care communication. A variety of methods and materials drawn primarily from sources for developing health-care communication skills was used to develop the curriculum.

Shi (2001) developed an English course for junior medical students in the first part of their clinical training at the University of British Columbia. Transcripts of video and audiotapes of six 1-hour sessions of ward teaching were analyzed to investigate the cognitive demands placed on students as they participated in making diagnostic hypotheses with experienced doctors. The aim was to identify the linguistic skills students needed in order to achieve various cognitive learning objectives. These included the skills of using appropriate everyday and technical terms to translate information from doctor-patient to doctor-doctor discourse. In the course that was developed, video sequences were used along with carefully designed teaching tasks to raise students' awareness of some of the cognitive and linguistic features of the discourse and to improve students' performance through practice. The findings indicated that authentic data

from student performance can be exploited to construct a tightly focused curriculum addressing students' needs.

Rattanapinyowong (1988) conducted a needs analysis study among medical students in Mahidol University in Bangkok. Data were collected from 351 questionnaires distributed to medical, nursing, and related fields' students. Interviews with teachers in different University departments were analyzed to identify the English language academic needs of these students. The findings indicated that fewer academic needs were expressed than expected. The participants emphasized the need for English courses designed for specific medical professions.

The previous studies presented investigations within the area of medical English. The following studies presents needs analysis research in other specialties.

In a study conducted within the EFL field Kittidhaworn (2002) investigated the English language needs of 182 second-year undergraduate engineering students in a public university in Thailand. A two-part questionnaire was constructed. The first part of the questionnaire asked for demographic data: gender, specialty, years of studying English in the school, and English proficiency in Listening, Speaking, Reading and Writing skills. The second part dealt with 45 items of English-language needs in four major areas: Language Structures, Rhetorical Categories, Language Functions, & Language Skills (Listening, Speaking, Reading and Writing). The findings of the study indicated that the majority of Thai engineering students have equal perceived English language needs in all four major areas, with all rated as moderately important or very important to learn in their program in engineering. The findings also revealed that perceived English language needs did not vary widely by demographic variables.

Seferoglu (2001) conducted a needs analysis study focusing on Turkish government-sponsored students who were studying towards masters or doctoral degrees in the US and

students who were being prepared in a language program in Ankara, Turkey in order to come to the US to continue their graduate studies. The purpose of this study was to gather information about the language needs as perceived by these students and to explore the extent to which classroom instruction in the language program in Turkey responded to these needs. Data were collected from a questionnaire distributed to 309 graduate Turkish students studying in various American universities and 21 students attending the language program in Turkey. The questionnaire asked students in both groups to rank the importance of the English language in academic life, TOEFL preparation, and daily activities. The majority of the respondents at American universities believed that their academic needs in learning English were far more important than their everyday needs. The majority of respondents from the language program in Turkey agreed. However, when students in the English language program were interviewed, they revealed a need more pressing than either academic or everyday English. Their immediate need was to score 500 or more on the TOEFL exam.

Jafre-Bin-Zainol-Abidin (1992) investigated English language needs for business purposes in Malaysia for science graduates. A questionnaire was distributed to the science students at the University of Malaysia and another questionnaire was distributed to personnel managers and employees in different companies in Malaysia. The participants ranked the use of English and the importance of each language skill. The findings indicated that students ranked reading as the most important skill, while employees ranked each skill differently based on the nature of their jobs. However, all skills were needed to perform basic tasks. The study recommended that 1) university courses should consider students' needs, 2) reading skills should be emphasized more in the academic environment, 3) students should participate in the identification of study texts, 4) teachers should pay close attention to individual needs, 5) only

senior students should take a course in ESP because students in earlier stages need to focus on the basic four skills.

Lambardo (1988) surveyed 200 students in the School of Economics to investigate students' perceived needs and attitudes about learning English as a second language. The results showed that students were motivated to learn English to have a better chance to get a job. Technical terminology was the major problem in reading. Understanding oral reports and participating in meeting were the most activities needed to succeed in their field. In regard to the importance of the four language skills, listening skills were the most important followed by speaking, reading, and writing.

The previous studies gave examples of different needs analysis around the world. The following overview reviews studies conducted specifically in the Arab Gulf countries with participants of similar socioeconomic backgrounds to the participants of this study. The discovery of oil in these countries has brought professionals from all over the world to participate in building new modern societies. As a result English has become a major tool of communication, necessitating the adoption of ESP approaches.

Al-Busaidi (2003) conducted a needs analysis study to investigate the academic needs of EFL learners at Sultan Qaboos University (SQU) in the Sultanate of Oman. Methods included interviews, e-mail dialogues, and a questionnaire. The participants included college and language program faculty members as well as undergraduate students at SQU. The study aimed to identify program practices that were most effective in meeting the learners' needs. The results showed that the students generally had mixed perceptions of the intensive program. This was partly due to the heterogeneity of the sample and sampling techniques. However, the inconsistency of some student responses was compensated for by qualitative data and faculty response data. One

important finding was that participants realized the importance of the intensive program as a means for academic preparation. However, the data pointed out some major gaps in the intensive program's curriculum. One of the main problems was the lack of integration between language and college courses. In addition, academic skills did not seem to receive enough coverage in the language program, negatively affecting learners' readiness for academic study. Suggestions to make the intensive program more effective and responsive to learners' needs included a hybrid content-based curriculum model to integrate language and college courses. The model designed a core language course based on the content of introductory college courses. It also included an academic skills course to make academic skill instruction more effective. Al-Busaidi also proposed that a credit-bearing university course be offered in the intensive program. Finally, Al-Busaidi suggested that more cooperation was needed between the Language Center and college teachers in order to raise awareness about learners' needs.

Almulhim (2001) investigated English language needs of Saudi employees in 101 companies representing different business sectors in the eastern province of Saudi Arabia. The investigation measured the level of English proficiency required in the four skills. A questionnaire was distributed to different companies and filled out by 308 employees and managers. The results revealed that the English language knowledge is required for employment in most companies and that the level of proficiency varies among different companies. In regard to language skills, managers and employees rated listening as the most important skill followed by speaking, reading, and writing respectively. The study concluded that though the English language is needed in the private sector, an intermediate level of proficiency is generally sufficient to conduct the job.

Another gulf area study was conducted at Kuwait University. Al-Bazzaz (1994) conducted a needs analysis study to investigate students' low achievement in English at the College of Business Studies. A questionnaire was distributed to students and teachers. Interviews and observations were also conducted. The results revealed English was used to communicate with non native speakers of Arabic in different areas involved with the business sector. The language knowledge required to deal with the labor market was attainable, but it was not adequately covered in the English language courses taught to students of business. The study proposed a model for course development.

Al-Gorashi (1988) investigated the English language needs for military cadets in Saudi Arabia as perceived by junior officers. Data were collected from 212 questionnaires distributed to officers representing different branches in the military to investigate the role of the English language in different activities required by their jobs and the kind of English language preparation that they undertake. The results showed that the English language plays an important role depending on the nature of each military branch. Some branches considered certain language skills important and others did not. The overall assessment considered reading and listening as the most important required skills. The result also indicated that the English language preparation that the officers received was poor. The study concluded that the language preparation does not meet the English language knowledge that the officers' jobs required.

In short, the field of ESP includes a number of needs analyses conducted on language programs in many different areas. Needs analysis has been conducted in ESL settings and EFL settings representing academic and professional ESP programs. In Arab Gulf countries, needs analysis studies have covered a group of different specialties. Al-Busaidi (2003) investigated academic English, Almulhim (2001) and Al-Bazzaz (1994) looked at business English, and Al-

Gorashi (1988) investigated military English needs. However, no study to date has looked specifically at the English language needs of medical professionals in the Gulf states region.

CHAPTER THREE

METHODOLOGY

This chapter is divided into five parts. The first part gives an overview about different methods in conducting needs analysis. The second part describes the setting and participants of the study. The third part describes the process of developing the questionnaire. The fourth part discusses the piloting and validation process. The last part describes the data collection process.

Overview

Robinson (1991) lists a number of different methods for conducting needs analysis. These include questionnaires, interviews, case studies, tests, and authentic data collection (e.g. analyzing actual manuals and written assignments). Jordan (1997) adds to these methods advanced documentation (e.g. requesting extra information that includes educational background, previously attended courses, and other relevant aspects), language tests at home, self-assessment, class progress tests, direct monitoring, structured interviews, learner diaries, previous research comparisons, and follow up investigations.

In all, the methods that can be used in needs analysis are highly varied. However, the most widely used methods are case studies, interviews and questionnaires (West, 1994).

A case study is a thorough method to investigate a learner's communication needs. It provides a close examination of what the learner needs to learn based on his/her personal

language ability. However, the drawback of this approach is that it is not cost effective. It requires a long period of time and it is not able to produce statistical and generalizable data.

Interviews are another method to utilize in a language needs investigation. Interview protocols usually contain open-ended questions aimed at guiding the subjects' responses. These give the researcher a wide variety of different responses that give a sense of the perceived language needs. However, the disadvantage of this approach is that the interpretation of the open-ended questions might not represent the intention of the subject. The subject also might be influenced in a face to face interview to give answers that satisfy the researcher. Moreover, in order to achieve a statistical generalization, the researcher needs to interview a large number of subjects which can be costly and time consuming.

For these reasons, the majority of studies in needs analysis use questionnaires as the primary method of data collection. Jordan (1997) indicates that the use of questionnaires is most convenient when dealing with large scale of data collection. Questionnaires enable the researcher to collect data from a large number of subjects in a short period of time. However, their main drawback is that the subjects might misinterpret the questions. Thus, it is crucial to pretest questionnaires before the distribution process. Another drawback is that the response rate can be low, especially when the questionnaire is mailed to the subjects rather than distributed and collected in person.

In all, Jordan (1997) indicates that there is no single approach to conduct needs analysis. Every researcher has different circumstances that influence the choice of method in conducting his/her investigation. It falls to the researcher to choose the method that best serves his/her goals and circumstances.

Questionnaires were determined to be the best means of investigation in this study. They were selected as the source of data collection for the following reasons.

- 1- The number of participants was expected to be fairly large.
- 2- They require minimal time from participants and provide a flexible and convenient way to participate in the study.
- 3- Participants could be assured of a certain degree of anonymity in their responses and could respond candidly.

The choice of study methods was unfortunately also influenced by geopolitical realities in the world today. Due to international students' present difficulties getting a visa to re-enter the USA, the researcher was unable to be present at the study site for data collection. Questionnaires allowed the possibility of distributing the questionnaire by mail.

Setting and Participants

As stated earlier, Saudi hospitals employ a multinational and a multilingual workforce. According to a Ministry of Health report, Saudi nationals represent only 13% of doctors, 11.2% of nurses, and 38% of medical technicians working in Saudi hospitals and clinics. When looking at the sites where the data were collected, of the 4191 degree-holding employees only 787 (18.7%) were Saudi. In fact, most medical employees are international professionals from all over the world. All employees are either trained in English or hired in part because they are proficient in English. As a result English comes as a natural choice in communication. This represents a unique situation where English is used as a lingua franca.

Since the goal of this study is to provide empirical data for the English language future communicative needs of Saudi college students in medical fields, the sample population focused

on Saudi health professionals in the workplace who graduated from the College of Medicine, College of Dentistry, College of Pharmacy, and College of Applied Medical Science (e.g. nursing, physical therapy, dental hygiene, nutrition, x-ray & medical technology, and clinical laboratory science). The sample population was selected from five medical facilities in the Riyadh area in order to cover all the health sciences mentioned above.

The literature on conducting questionnaires in second language research indicates that there is no rule in setting the optimal sample size. However, Dornyei (2003) indicates three major guidelines to determine an appropriate sample size:

- 1- Having 1% to 10% of the targeted population is adequate to represent an accurate sample of the population.
- 2- The return rate with voluntary questionnaires is between 20% to 50%.
- 3- L2 studies based on questionnaires need a minimum of 100 respondents to reach statistical significance.

The researcher first obtained data on the number of medical graduates from King Saud University in order to have an idea about the number of graduates joining the professional field every year (Table 3.1).

The figures indicate that the colleges collectively graduate approximately 500 students per year. However, they do not show how many graduates work in the Riyadh area. Thus, the second step was to obtain data representing the numbers of Saudi health professionals with college degrees in different hospitals in the Riyadh area. In choosing hospitals, the aim was to choose medical facilities concerned with varying types of medical care in order to maximize the chances of getting respondents covering different medical fields. The researcher started by selecting two major hospitals in the Riyadh area; King Abdulaziz

Medical City (KAMC) and the Riyadh Armed Forces Hospital (RAFH). Though King Abdulaziz Medical City includes eight different medical centers, only the most comprehensive two centers were selected: the Comprehensive Specialized Clinics (CSC) and the Emergency Care and Trauma Center (ECT). The second major hospital was the Riyadh Armed Forces Hospital which also includes medical facilities in three different locations. From this hospital, two medical facilities were selected: Prince Sultan Cardiac Center (PSCC) and the Outpatient Clinics Center (OCC). A third selection was the Sports Medicine Hospital (SMH) known for its applied medical services. Though this hospital is smaller than the other two hospitals, the applied medical service that it provides was the factor in this choice. In all, these three hospitals representing five medical facilities were the intended source for data collection.

A letter was sent to the human resources offices at these hospitals asking about the number of Saudi health professionals with college degrees. The letter also asked about the number of international employees and the language that the hospital uses as the tool of communication when conducting medical activities (Table 3.2).

The responses indicated that these hospitals employ a total of 787 Saudi health professionals. This figure gave the researcher an indication that the number of health professionals would be adequate to carry out a reliable study.

To sum up, the sample for this investigation consisted of health professionals representing a number of different professions in the medical field including physicians, dentists, pharmacists, and applied medical technicians. Participants were Saudi nationals working at King Abdulaziz Medical City, Riyadh Armed Forces Hospital, and the Sports Medicine Hospital.

Table 3.1
 Graduates from the Medical Colleges at KSU in 2000-2001

College	Saudi			Non Saudi			Total		Combined Total
	male	Female	total	male	female	total	male	female	
Pharmacy	50	47	97	1	4	5	51	51	102
Medicine	101	26	127	1	2	3	102	28	130
Dentistry	30	29	59	0	0	0	30	29	59
Applied medical science	91	107	198	0	6	6	91	113	204
Combined Total	272	209	481	2	10	14	274	221	495

Retrieved December 20, 2003 from <http://www.ksu.edu.sa/statics/index1.htm>

Table 3.2 Study Site (Saudi Employees)

	CSC	ECT	PSCC	OCC	SMH
How many Saudis with college degrees work in the medical field in your facility?	282	72	82	211	140
How many non-Saudis with college degrees work in the medical field in your facility?	1637	300	264	1027	963
What is the language used at your facility when conducting medical activities?	English	English	English	English	English

Developing the Questionnaire

Questionnaire design for this study followed common principles of designing questionnaires in second language research (e.g. Dornyei, 2003; Jordan, 1997; Brown 1995; Oppenheim, 1992). Previous literature in needs analysis that has similar goals and purposes was also consulted (e.g. Al-Gorashi, 1988; Zainol Abidin, 1992; Al-Bazzaz, 1994; and Almulhim, 2001). The questionnaire was designed in four parts (see Appendix A).

Part one

The first part consisted of participant biographical data. It was necessary for the purposes of this research to obtain biographical information about the respondents for two reasons. First, providing information about job title and specialty ensured that participants were indeed serving within the health science community. Any questionnaire filled out by anyone from outside the domain of the intended population was disregarded. Second, information about the year of graduation and college degree helped to compare the experiences of different cohorts.

Part two

The second part of the questionnaire was designed to provide data to answer the first research question:

To what extent is the English language used in the careers of medical professionals at hospitals in the Riyadh area?

In order to answer this question, four sub-questions were designed. The first sub-question sought information about the overall perceived percentage of using English at the work place. Item 7 of the questionnaire represented this question.

The second sub-question sought information about the usage of English in medical training in the workplace. Items 8 and 9 of the questionnaire represented this question. Item 8 required a yes/no answer and item 9 asked the respondents to circle the language used.

The third sub-question sought information about usage of English with other people at the work place. Items number 10 and 11 of the questionnaire represented this sub question. Item number 10 used a yes/no answer and item number 11 used a Likert-type scale providing four choices (e.g. “a lot,” “somewhat,” “a little” and “never”).

The last sub-question in this part sought information about the perceived importance of using English as a tool of communication to conduct the job. The purpose of this question was to analyze the relation between participants’ extent of usage and perceived importance of usage. Item number 12 of the questionnaire represented this sub-question which used Likert-type scale providing four choices (e.g. “very important,” “somewhat important,” “little importance” and “not important”).

Part three

This part of the questionnaire was designed to provide data to answer the second research question:

What level of the reading, writing, listening and speaking skills of the English language are required in the workplace and for performing what kind of activities?

Two sub-questions were designed. The first sub-question sought information about which of the four English language skills are emphasized at the work place. Information about the four skills was important to compare and contrast their usage in the medical field. Items number 13, 14, 15, 16, and 17 presented this sub-question. The first four items used a Likert-type scale providing four choices (e.g. “excellent level,” “good level,” “satisfactory level” and “N/A”).

Item 17 of the questionnaire asked the respondents to rank the importance of the four skills that they evaluated in the previous questions. This item gives an overall estimate of the emphasized skill at the work place and it is also used as a cross-check question since the answer to this question should be presumably consistent with the answers to the previous four questions. Dornyei (2003) indicates that a good questionnaire uses a cross-check question to inform the researcher about the reliability of his respondents. If the answer to this question were not consistent with the previous four questions, the inconsistency would hint that the respondents were not paying attention to the questions and they were answering carelessly.

The second sub-question sought information about the degree of the perceived importance of each of the four skills (listening, speaking, reading, and writing) in various job-related activities. Choosing these activities was not an easy task. It was infeasible to ask the respondents to have or generate a list of their own activities due to time limitations and possible problems with reliability. Since no previous investigation of medical English needs had been done in Saudi Arabia, the researcher generated a list of possible activities. The list was then presented to five Saudi health professionals for feedback. All activities were perceived as relevant to the medical field and one new activity was added to the list. To account for any other unanticipated activities, the researcher left a blank at the end of the activities and asked respondents to write down any additional activity that they thought was relevant. Item 18 of the questionnaire represented these activities. To rank the importance of the language skills in each activity, a scale from 1 to 5 was used, with 1 representing most important and 5 represented least important. It would have been more logical for 5 to represent the most important value, but since all the Likert-type scales used throughout the questionnaire started with the highest value, reversing the order might have confused the respondents.

Part four

The last part of the questionnaire was designed to provide data to answer the third research question:

Do graduates of the medical colleges feel that they were prepared in terms of their English language ability to meet their current communication needs?

This research question had three sub-questions. The first one sought information about perceived English language ability before and after college. Items 19 and 22 represented this sub-question. Both items used a Likert-type scale providing four choices; “very good,” “satisfactory,” “poor” and “very poor.” Choosing the values for the Likert-type scale presented a concern. The original idea was to use “excellent” as the highest value. However, previous studies in Saudi Arabia indicate that most students graduate from high school with a poor knowledge of English (Almulhim, 2001; Al-Gorashi, 1988; Ministry of Education, 1984; Al-Kamookh, 1981). Therefore, “very good” was assigned as the highest value to maximize the scale of responses.

The second sub-question sought information about the relevance of English language courses at college for activities performed in the workplace. Item number 20 represented this sub-question with activities involving the four English language skills. This item also used a Likert-type scale providing four choices; “a lot,” “somewhat,” “a little” and “did not help at all.”

The last sub-question sought information about the relevance of the college English language courses taken to participants’ medical field. This sub-question is represented by item number 21 which also used a Likert-type scale providing four choices; “a lot,” “somewhat,” “a little” and “not relevant at all.”

Table 3.3 summarizes the research questions with their sub-questions and their related questionnaire items.

Table 3.3

Chart of Research Questions, Sub-questions, and Questionnaire Items

Research Question	Sub-questions with questionnaire items
<p>1- To what extent is the English language used in the careers of medical professionals at hospitals in the Riyadh area?</p>	<ol style="list-style-type: none"> 1- What is the perceived percentage of using English in the workplace? (item 7 in the questionnaire) 2- Does medical training require the usage of English? (items 8 and 9 in the questionnaire) 3- Does communication with other employees require the usage of English? (items 10 and 11 in the questionnaire) 4- Do health professionals perceive English as an important tool of communication? (item 12 in the questionnaire)
<p>2- What level of the reading, writing, listening and speaking skills of the English language are required in the workplace and for performing what kind of activities?</p>	<ol style="list-style-type: none"> 1- Which of the skills (reading, writing, listening, and speaking) is more emphasized in the workplace? (items 13,14,15,16 and 17 in the questionnaire) 2- What kind of activities are the four skills used for? (item 18 in the questionnaire)
<p>3- Do graduates of the medical colleges feel that they were prepared in terms of their English language ability to meet their current communication needs?</p>	<ol style="list-style-type: none"> 1- How do health professionals perceive their English language ability before and after college? (items 19 and 22 in the questionnaire) 2- Are the English language courses at college relevant to the activities performed in the workplace? (item 20 in the questionnaire) 3- Do health professionals feel that the English language courses at the college level are based on medical English? (item 21 in the questionnaire)

Piloting and Validation

The questionnaire was designed in English and translated into Arabic before piloting. The participants answered the Arabic version of the questionnaire only. The questionnaire consisted of four pages and was designed to be answered within twenty minutes. Dornyei (2003) indicates that the optimal length of a questionnaire in second language research is three to four pages. It should not exceed a 30-minute completion limit.

While designing the questionnaire, the researcher paid special attention to the layout of the questionnaire in terms of fonts, spacing, and paper quality. Oppenheim (1992) argues that the professional quality of the layout can give a good impression about the questionnaire, which in turn affects the quality of the responses.

Dornyei (2003) indicates that respondents can be reluctant to give honest answers about opinions and perceptions. However, respondent confidentiality can encourage honesty and willingness to disclose. Therefore, the questionnaire was designed to avoid individually identifiable information. The respondents were not required to write their names. Moreover, the cover page (see Appendix A) told participants that the data was to be used for research and academic publication purposes only and that all responses would be held confidential. The cover page also included the researcher's email in case respondents wished to provide additional feedback.

The cover page of the questionnaire was used as an implied consent form. The researcher requested the Human Subjects Research Office at the University of Georgia to waive the requirement of having the respondents sign their names. This request was for the following reasons:

- 1- The cover page of the questionnaire clearly stated “Please note that by completing this questionnaire you agree that the researcher is allowed and permitted to use the information that you provide for research and publication purposes only.”
- 2- The study was designed to be anonymous. Respondents’ signed names would have eliminated the anonymity of the questionnaire.
- 3- All the respondents were adults and participation was voluntary. The questionnaire did not ask about sensitive data. Therefore, the information elicited from the data reflected minimal risk on the respondents.
- 4- Data collection was conducted in Riyadh, Saudi Arabia. From a cultural point of view, participants might have been reluctant to respond if they had been asked to sign their names.

After translating the first draft of the questionnaire, it was sent to three Saudi linguists (Almeniei at the University of Georgia, Nawman at the University of California, and Almadhkali at Ball State University). All looked at the Arabic and English versions of the questionnaire and provided feedback in terms of clarity and translation.

Next the questionnaire was piloted to check its validity, reliability, and applicability.

Piloting ensured that:

- 1- The questions were related to the respondents’ field of work.
- 2- The activities were related to their workplace activities.
- 3- The questions were clear and easy to read.
- 4- The time taken to answer the questionnaire was reasonable.
- 5- All items were easy to understand.
- 6- The researcher also elicited other comments from pilot respondents on the general design of the questionnaire.

The researcher designed a page of evaluative questions for pilot respondents based on the above criteria. The Arabic version of the questionnaire along with the evaluation page was sent to five different Saudi professionals in the medical field (two physicians, two medical lab specialists, and a pharmacist). These professionals were asked to respond to the questionnaire and then complete the evaluation page (Table 3.4).

Responses to the evaluative questions went as follows:

- 1- All respondents indicated that the questions were related to their field of work.
- 2- One respondent added additional activities to the comment section.
- 3- All respondents indicated that the questions were clear and easy to read.
- 4- Four respondents answered the questionnaire within 20 minutes and only one respondent answered the questionnaire in 26 minutes. Dornyei (2003) and Oppenheim (1992) indicate that 20 minutes is a suitable time for a successful questionnaire. Since the average time taken to answer the questionnaire among all respondents was within a time frame of twenty minutes, the length of the questionnaire was deemed acceptable.
- 5- All respondents indicated that they understood all items.
- 6- In the comment section of the evaluation, only one respondent commented on the questionnaire. He indicated that putting a US address in the cover page regarding his rights as a respondent (as required by the Human Subjects Office) did not make sense. However, since there was no such address in Saudi Arabia that could be used instead, the researcher had to leave this part without modification.

After the completion of the pilot study, all necessary modifications were made in order to meet the requirements of a reasonable and sound design.

Table 3.4
Evaluation Chart for the Pretesting Phase of the Questionnaire

	Respondent #	Respondent # 2	Respondent # 3	Respondent # 4	Respondents # 5
Do you think all the questions are relevant to your field of work?	yes	yes	yes	Yes (very much)	yes
Do you think the activities in part 3 are related to your work	yes	yes	yes	Yes and I added other ones	yes
Are the questions clear and easy to read?	yes	yes	yes	yes	yes
How long did it take you to finish the questionnaire?	8 minutes	15 minutes	15 minutes	26 minutes	17 minutes
Is there any item that you did not understand	no	no	no	no	no
Do you have any other observations about the questionnaire?	no	I wish you good luck	no	In the cover page you put an address in the United States about my rights as a research participant. I think this does not make sense. Can you provide an address in Saudi Arabia	Good luck with your dissertation

Data Collection

Data were collected from the following hospitals in the Riyadh area: King Abdulaziz Medical City, Riyadh Armed Forces Hospital, and the Sports Medicine Hospital.

In February, 2004, the researcher contacted the selected hospitals to ask their permission to distribute the questionnaire and the protocol to do so. The officials asked the researcher to write a letter of request containing the nature and purpose of the study along with a copy of the questionnaire. After doing so, the hospitals sent the researcher letters of permission to distribute the questionnaires (see Appendix C).

The initial plan of the researcher was to go to Saudi Arabia to collect the data. However, while conducting the pilot study for this investigation in the summer of 2003, the researcher encountered difficulties returning to the United States due to increasing restrictions on visas to enter the US. As a result, the researcher instead recruited an assistant in Saudi Arabia to distribute the questionnaires to the selected hospitals.

On March 10th, 2004, the researcher sent the final version of the questionnaire to his assistant in Riyadh who made 787 copies. The researcher called the officials at the hospitals and explained to them the nature of the study and informed them that his assistant would hand them the questionnaires. When the assistant went to each selected hospital, he also explained orally to the heads of Human Resources at each hospital the nature of the study. The cover page of the questionnaire also contained written explanation about the nature of the study. The researcher and the assistant made daily follow up phone calls to each hospital in order to ensure the maximum possible response rate. The assistant went to each hospital to collect questionnaires from the hospitals at the beginning of May, 2004. The researcher received the questionnaires back on May 17, 2004. A total of 787 questionnaires were distributed. Out of these 787

questionnaires, 259 came back which represents a response rate of 32.9%. Out of the 259 received questionnaires, 34 were disregarded due to incomplete answers or non qualified respondents (e.g. respondents who did not have a college degree). This brought the total number of usable forms to 225 questionnaires or 28.5% of Saudi health professionals at the study sites.

CHAPTER FOUR

RESULTS AND ANALYSIS

The purpose of this chapter is to present and analyze the collected data from the sample population. The chapter is divided into four parts. The first part introduces the method used in data analysis. It also gives an idea about each group of respondents in terms of the universities that they graduated from and the medical fields that they belong to. The second part of this chapter presents the results of the first research question, the third part presents the results of the second research question, and the last part presents the results of the third research question. For each research question, the frequencies and percentages of the responses are tabulated at the end of each related part.

Introduction

The questionnaire used in collecting data in this study contained 22 items. Some of the items were subdivided into different attributes. In analyzing the data, first the responses for each questionnaire item were manually coded in a Microsoft Excel document. Then, a statistical package (SPSS) was used to generate the frequencies and percentages for each coded item.

Frequencies and percentages were calculated for each group of respondents (e.g. physicians, dentists, pharmacists, and applied medical specialists) and for the entire sample population.

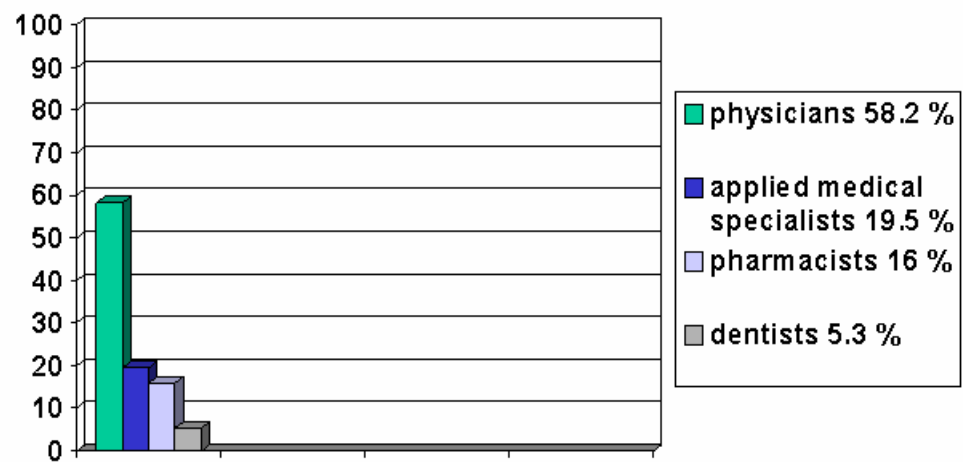
The usable questionnaires were filled out by 225 respondents. 202 respondents were from King Saud University, 7 respondents were from King Fahad University, 14 respondents were from King Abdulaziz University, and 2 respondents who did not indicate the university from which they had graduated. The vast majority of the respondents were from King Saud University representing 89.7 % of the sample population. This result was expected since the study took place in Riyadh, Saudi Arabia where the main branch of King Saud University is located.

In regard to the medical fields of the respondents, 131 respondents were physicians, 44 respondents were applied medical technicians, 36 respondents were pharmacists, 12 respondents were dentists, and 2 respondents did not indicate their specialty.

While all science medical professionals were represented in the sample population, the sample was not proportional. Physicians represented more than half of the sample population (58.2 %) followed by applied medical technicians (19.5 %), pharmacists (16 %), and dentists (5.3 %). Chart 4.1 represents the percentages of each profession in the sample population.

Given the proportion of these fields in retrospect to the number of graduates from the medical colleges in King Saud University in the school year of 200-2001, it appears that physicians were somewhat over-represented. Applied medical technicians and pharmacists were somewhat under-represented and the proportion of dentist respondents was relatively similar to their proportion among recent graduates of the medical colleges. Chart 4.2 represents these numbers and percentages.

Distribution of professions in the sample population
chart 4.1



Graduates from the medical colleges at KSU in 2000-2001
chart 4.2



Results of the First Research Question

The results of the data from item 7 to item 12 of the questionnaire provide answers to the first research question:

To what extent is the English language used in the careers of medical professionals at hospitals in the Riyadh area?

Table 4.1 represents an overview of the first research question along with its sub-questions and questionnaire items.

In regard to item 7 of the questionnaire, the respondents were asked to provide a percentage of using English in the workplace. The participants' perceptions were varied. Their perceived percentage of English use was as low as 20% (perceived by one respondent representing less than 1 % of the sample population) and as much as 100% (perceived by 10 respondents representing 4.5 % of the sample population). The perceived percentage of the majority of respondents was in the range of 50% to 95% (perceived by 190 respondent representing 70.3 % of the sample population). Table 4.2 represents these percentages.

However, the mean value of using English at the work place among all participants was 77.3%. When looking at the average percentage for each profession separately, physician's average perception was 87.8 % (from 131 respondents), pharmacists' average perception was 70.2 % (from 36 respondents), applied medical technicians' average perception was 67.09 % (from 44 participants), and dentists' average perception was 84.8 % (from 12 participants). These results show that while the perceived perception of English use varies somewhat by profession, there is an agreement among all respondents that the English language is used extensively in the workplace and plays an important role in all of the respondents' professional lives. The data

indicate that health professionals in all fields use the English language extensively and therefore they need a high command of the English language to perform their jobs.

Item 8 and 9 of the questionnaire asked about whether medical training requires the usage of the English language. In item 8 (Table 4.3), the respondents were asked whether they were engaged in medical training courses while working at the hospitals. Only 47 respondents (21.0%) reported that they did take medical training courses, while 177 respondents (71.0%) reported that they did not. This result was unexpected by the researcher. However, it is interesting to note that the majority of the respondents are relatively new to the medical field. 75.6% of them graduated between the year 1999 and the year 2004. This indicates that they are newly employed at the health profession. Newly graduated medical professionals are least likely to participate in medical training courses since these courses are intended to provide continuing education and ongoing professional development. In item 9 of the questionnaire (Table 4.4), the respondents were asked to indicate the language used in medical training. Out of the 47 respondents, 37 indicated that the language used is English. Only five respondents indicated that the Arabic language is used and four respondents indicated that both languages are used. This shows that the majority (80.4%) of these respondents use the English language as the tool of communication when taking medical training.

The next two items of the questionnaire were related. Item 10 sought information to point out a certain group of respondents in order to elicit certain information through item 11 regarding the nature of their job. The purpose of these two questions was to compare their results with the previous results to determine the use of the English language in the workplace.

Accordingly, Item 10 of the questionnaire (Table 4.5) asked about whether the respondents have coworkers who communicate only in the English language. 161 respondents (71.6%) reported that their workplace includes coworkers who only communicate in English.

Based on that, Item 11 of the questionnaire (Table 4.6) asked how often the nature of the job requires the respondent to communicate with coworkers who only communicate in English. This question implemented a Likert scale with the following values: “a lot,” “somewhat,” “a little” and “never.” In their response to this question, 99 (61.9%) of the 161 respondents who indicated that their workplace includes coworkers who only communicate in English, reported that they communicate “a lot” with these coworkers. 52 respondents (32.5 %) reported that they communicate “somewhat” with their English-only coworkers. 8 respondents (5.0 %) reported that they communicate a little and only one respondent (0.6 %) reported that he/she never communicate with coworkers who speak English only. This shows that the majority of the respondents communicate heavily with coworkers using the English language.

Item 12 of the questionnaire (Table 4.7) asked how important is it to have a high level of English proficiency to perform the job. In their response to this question, 164 (72.9 %) reported that English is “very important” to perform the job effectively. 51 respondents (22.7%) reported that English is “somewhat important” and nine respondents (4.0%) reported that English is “of little importance”. Only one respondent (0.4%) reported that English is “not important” to perform the job effectively.

In conclusion, when comparing the previous results, it is obvious that the English language is not only used extensively at the work place, but also plays an important role in the professional life of the respondents.

Table 4.1
First Research Question and its Sub-questions

Research Question	Sub questions with questionnaire items
<p>1- To what extent is the English language used in the careers of medical professionals at hospitals in the Riyadh area?</p>	<ol style="list-style-type: none"> 1- What is the perceived percentage of using English in the workplace? (item 7 in the questionnaire) 2- Does medical training require the usage of English? (items 8 and 9 in the questionnaire) 3- Does communication with other employees require the usage of English? (items 10 and 11 in the questionnaire) 4- Do health professionals perceive English as an important tool of communication? (item 12 in the questionnaire)

Table 4.2
Distribution of Frequencies and Percentages of the Perceived Percentage of Using English in the
Workplace

Perceived percentage	Frequency	%
20%	1	0.4
25%	2	0.9
30%	4	1.8
40%	8	3.6
45%	1	0.4
50%	10	4.5
55%	2	0.9
60%	9	4.0
65%	3	1.3
70%	25	11.2
73%	1	0.4
75%	19	8.5
77%	1	0.4
78%	1	0.4
80%	37	16.5
81%	1	0.4
85%	31	13.8
87%	1	0.4
88%	2	0.9
89%	1	0.4
90%	32	14.3
93%	1	0.4
94%	1	0.4
95%	12	5.4
97%	1	0.4
98%	2	0.9
99%	4	1.8
99.99%	1	0.4
100%	10	4.5

Mean = 77.35

Total responses = 224

Missing = 1

Table 4.3
Distribution of Frequencies and Percentages of Medical Training in the Workplace

Responses	Frequency	%
Yes	47	20.9
No	177	78.7

Total responses = 224

Missing = 1

Table 4.4
Distribution of Frequencies and Percentages of Languages Used in Medical Training in the
Workplace

Language	Frequency	%
Arabic	5	10.86
English	37	80.43
Both	4	8.69

Total responses = 46

Missing = 1

Table 4.5
Distribution of Frequencies and Percentages of Having People in the Workplace who
Communicate in English only

Responses	Frequency	%
Yes	161	71.6
No	64	28.4

Total responses = 225

Missing = 0

Table 4.6
Distribution of Frequencies and Percentages of Communicating with People in the Workplace
who Communicate in English only

Responses	Frequency	%
A lot	99	61.9
Somewhat	52	32.5
A little	8	5.0
Never	1	0.6

Total responses = 160

Missing = 1

Table 4.7
Distribution of Frequencies and Percentages of the Importance of Having a High Level of
English Proficiency to Perform the Job Effectively

Responses	Frequency	%
Very important	164	72.9
Somewhat important	51	22.7
Little importance	9	4.0
Not important	1	0.4

Total responses = 225

Missing = 0

Results of the Second Research Question

The results of the data from item 13 to item 18 of the questionnaire provide answers to the second research question (Table 4.8):

What level of English reading, writing, listening and speaking skills of the English language are required in the workplace, and for performing what kind of activities?

Items 13,14,15,16 and 17 of the questionnaire sought information about which of the language skills (reading, writing, listening, and speaking) is more emphasized at the work place. Item 18 of the questionnaire sought information about the kind of activities that the four skills are used for.

Items 13 to 16 are concerned with the listening skills, speaking skills, reading skills, and writing skills respectively. The respondents were asked about the level of proficiency of each skill that would enable them to perform their job effectively. These four questions about the language skills implemented a Likert scale with the following values “excellent level,” “good level,” “satisfactory level”, and “N/A.”

In item 13 concerned with listening skills (Table 4.9), 141 (62.7 %) of the respondents indicated that they need an “excellent level” of listening skills to perform their job effectively. Many others reported that they need a “good level” of listening skills (68 respondents, 30.2 %). The rest of the respondents (15 participants, 6.7 %) indicated that a “satisfactory level” is required. Only one respondent reported that listening skills in English were not required at all.

These results for listening skills were also broken down by profession. For physicians (Table 4.10), 61 % indicated that they need an “excellent level” of listening skills to perform their job effectively. 33.5 % indicated that they need a “good level” and 4.5 % indicated that they need a “satisfactory level.” Only one indicated that listening skills were not required at all.

For dentists (Table 4.11), 80 % indicated that they need an “excellent level” of listening skills to perform their job effectively and 25 % indicated that they need a “good level.”

For pharmacists (Table 4.12), 58.3 % indicated that they need an “excellent level” of listening skills to perform their job effectively. 33.3 % indicated that they need a “good level” and 8.3 % indicated that they need a “satisfactory level.”

For applied medical technicians (Table 4.13), 68.1 % indicated that they need an “excellent level” of listening skills to perform their job effectively. 18.1 % indicated that they need a “good level” and 13.6 % indicated that they need a “satisfactory level.”

In item 14 concerned with speaking skills (Table 4.14), 132 (58.7%) indicated that they need an “excellent level” of speaking skills to perform their job effectively (58.7%). 68 respondents (30.3%) indicated that a “good level” is needed. The rest of the respondents indicated that a “satisfactory level” is required (23 participants, 10.2 %) and only two respondents reported that English speaking skills are not required (less than 1.0 %).

These results for speaking skills were also broken down by profession. For physicians (Table 4.15), 52.6 % indicated that they need an “excellent level” of listening skills to perform their job effectively. 35.1 % indicated that they need a “good level” and 11.4 % indicated that they need a “satisfactory level.” Only one respondent indicated that listening skills were not required at all.

For dentists (Table 4.16), 50 % indicated that they need an “excellent level” of listening skills to perform their job effectively and 50 % indicated that they need a “good level.”

For pharmacists (Table 4.17), 77.7 % indicated that they need an “excellent level” of listening skills to perform their job effectively. 19.4 % indicated that they need a “good level” and only one respondent indicated that a “satisfactory level” is needed.

For applied medical technicians (Table 4.18), 63.6 % indicated that they need an “excellent level” of listening skills to perform their job effectively. 18.1 % indicated that they need a “good level” and 15.9 % indicated that they need a “satisfactory level.” Only one respondent indicated that reading skills were not required at all.

In item 15 concerned with reading skills (Table 4.19), 156 (69.3%) indicated that they need an “excellent level” of reading skills to perform their job effectively. 50 respondents (22.2%) indicated that a “good level” is needed. The rest of the respondents indicated that a “satisfactory level” is required (16 participants, 7.1 %) and three respondents reported that this skill is not required (1.3 %).

These results for reading skills were also broken down by profession. For physicians (Table 4.20), 72.5 % indicated that they need an “excellent level” of listening skills to perform their job effectively. 21.3 % indicated that they need a “good level” and 5.3 % indicated that they need a “satisfactory level.” Only one respondent indicated that listening skills were not required at all.

For dentists (Table 4.21), 75 % indicated that they need an “excellent level” of listening skills to perform their job effectively and 25 % indicated that they need a “good level.”

For pharmacists (Table 4.22), 63.8 % indicated that they need an “excellent level” of listening skills to perform their job effectively. 27.7 % indicated that they need a “good level” and 8.3 % indicated that they need a “satisfactory level.”

For applied medical technicians (Table 4.23), 63.6 % indicated that they need an “excellent level” of listening skills to perform their job effectively. 18.1 % indicated that they need a “good level” and 13.6 % indicated that they need a “satisfactory level.” Only two respondents indicated that reading skills were not required at all.

In item 16 concerned with writing skills (Table 4.24), 131 (58.2%) of the respondents indicated that they need an “excellent level” of writing skills to perform their job effectively. 72 respondents (32.0 %) indicated that a “good level” is needed. The rest of the respondents indicated that a “satisfactory level” is required (18 participants, 8.0 %) and four respondents reported that this skill is not required (1.8 %).

These results for writing skills were also broken down by profession. For physicians (Table 4.25), 51.9 % indicated that they need an “excellent level” of listening skills to perform their job effectively. 38.9 % indicated that they need a “good level” and 8.3 % indicated that they need a “satisfactory level.” Only one respondent indicated that listening skills were not required at all.

For dentists (Table 4.26), 50 % indicated that they need an “excellent level” of listening skills to perform their job effectively and 50 % indicated that they need a “good level.”

For pharmacists (Table 4.27), 80.5 % indicated that they need an “excellent level” of listening skills to perform their job effectively. 16.6 % indicated that they need a “good level” and only one respondent indicated that a “satisfactory level” is needed.

For applied medical technicians (Table 4.28), 61.3 % indicated that they need an “excellent level” of listening skills to perform their job effectively. 18.1 % indicated that they need a “good level” and 13.6 % indicated that they need a “satisfactory level.” Only three respondents indicated that reading skills were not required at all.

Overall, the data show that the majority of participants believe that an “excellent level” of all four skills is required to perform the job. Reading skills were most frequently ranked as the skill that requires an excellent level to perform the job (69.3 %). Listening skills were very close with 62.7 %. Speaking skills and writing skills had a marginal difference, with speaking skill

receiving 58.7 % and writing 58.2 %. These results show that a high command of English is needed in all four skill areas. When breaking down the results by profession, the results reflected the over all view in which a high command of all skills is required.

Item 17 of the questionnaire (Table 4.29) was designed to cross check the previous four items. In this item, the respondents were asked to rank the four language skills in terms of their importance to conduct their jobs. 65 respondents (29.3 %) ranked listening skills as the most important, 77 respondents (34.7 %) ranked it as the second most important, 57 respondents (25.7 %) ranked it third and 23 respondents (10.4 %) ranked it fourth. 42 respondents (19.4 %) ranked speaking skills as the most important, 65 respondents (30.1 %) ranked it as the second most important, 58 respondents (26.9 %) ranked it third and 51 respondents (23.6 %) ranked it fourth. In regard to reading skills, 110 respondents (49.5 %) ranked it as the most important, 53 respondents (23.9 %) ranked it as the second most important, 35 respondents (15.8 %) ranked it third and 24 respondents (10.8 %) ranked it fourth. The final skill in this item was writing skills. Nine respondents (4.2 %) ranked it as the most important, 31 respondents (14.5 %) ranked it as the second most important, 63 respondents (29.4 %) ranked it third and 111 respondents (51.9 %) ranked it fourth. The results here showed that reading skills were ranked first followed by listening skills. Speaking skills were ranked third and writing skills were ranked fourth. These results are consistent with the results of the previous question.

These results from item 17 of the questionnaire were also broken down by profession. For physicians (Table 4.30), 39 respondents (30 %) ranked listening skills as the most important, 47 respondents (36.1 %) ranked it as the second most important, 35 respondents (26.9 %) ranked it third and nine respondents (6.9 %) ranked it fourth. 51 respondents (39.2 %) ranked speaking skills as the most important, 33 respondents (25.3 %) rank it as the second most important, 26

respondents (20 %) ranked it third and 20 respondents (15.3 %) ranked it fourth. In regard to the reading skill, 35 respondents (27.1 %) ranked it as the most important, 36 respondents (27.9 %) ranked it as the second most important, 32 respondents (24.8 %) ranked it third and 26 respondents (20.1 %) ranked it fourth. The final skill in this item was writing skills. 46 respondents (36.2 %) ranked it as the most important, 17 respondents (13.3 %) ranked it as the second most important, 35 respondents (27.5 %) ranked it third and 29 respondents (22.8 %) ranked it fourth.

For dentists (Table 4.31), six respondents (54.5 %) ranked listening skills as the most important, two respondents (18.1 %) ranked it as the second most important and three respondents (27.3 %) ranked it fourth. five respondents (45.4 %) ranked speaking skills as the most important, four respondents (36.3 %) rank it as the second most important, one respondent (9 %) ranked it third and one respondent (9 %) ranked it fourth. In regard to the reading skill, two respondents (33.3 %) ranked it as the second most important, two respondents (33.3 %) ranked it third and two respondents (33.3 %) ranked it fourth. The final skill in this item was writing skills. One respondent (16.6 %) ranked it as the second most important, three respondents (50 %) ranked it third and two respondents (33.3 %) ranked it fourth.

For Pharmacists (Table 4.32), ten respondents (27.7 %) ranked listening skills as the most important, 12 respondents (33.3 %) ranked it as the second most important, 12 respondents (33.3 %) ranked it third and two respondents (5.5 %) ranked it fourth. 20 respondents (55.5 %) ranked speaking skills as the most important, eight respondents (22.2 %) rank it as the second most important, six respondents (16.6 %) ranked it third and two respondents (5.5 %) ranked it fourth. In regard to the reading skill, six respondents (16.6 %) ranked it as the most important, eight respondents (22.2 %) ranked it as the second most important, eight respondents (22.2 %) ranked

it third and 14 respondents (38.8 %) ranked it fourth. The final skill in this item was writing skills. Eleven respondents (30.5 %) ranked it as the second most important, nine respondents (25 %) ranked it third and 16 respondents (44.4 %) ranked it fourth.

For applied medical technicians (Table 4.33), nine respondents (20.9 %) ranked listening skills as the most important, 15 respondents (34.8 %) ranked it as the second most important, ten respondents (23.2 %) ranked it third and nine respondents (20.9 %) ranked it fourth. 32 respondents (74.4 %) ranked speaking skills as the most important, eight respondents (18.6 %) rank it as the second most important, two respondents (4.6 %) ranked it third and one respondent (2.3 %) ranked it fourth. In regard to the reading skill, one respondent (2.3 %) ranked it as the most important, 19 respondents (44.1 %) ranked it as the second most important, 14 respondents (32.5 %) ranked it third and nine respondents (20.9 %) ranked it fourth. The final skill in this item was writing skills. Two respondents (4.6 %) ranked it as the most important, two respondents (4.6 %) ranked it as the second most important, 16 respondents (37.2 %) ranked it third and 23 respondents (53.4 %) ranked it fourth.

Question 18 of the questionnaire sought information about the importance of English proficiency when conducting different activities at the workplace. The participants were given thirteen activities, and they were asked to rank the importance of having a high level of English proficiency when using the language skills involved in each activity. The activities were presented in a table format with Likert scales for each relevant skill.

Item A (Table 4.34) of question 18 asked about the importance of having a high level of proficiency in listening and speaking skills when “dealing with patients.” In regard to listening skills, 30 respondents (13.4 %) ranked it as the most (extremely) important, 17 respondents (7.6 %) ranked it as the second most important, 26 respondents (11.6 %) ranked it third, 68

respondents (30.4 %) ranked it fourth and 83 respondents (37.1 %) ranked it fifth. For speaking skills, 24 respondents (10.8 %) ranked it as the most important, 16 respondents (7.2 %) ranked it as the second most important, 27 respondents (12.1 %) ranked it third, 53 respondents (23.8 %) ranked it fourth and 103 respondents (46.2 %) ranked it fifth.

Item B (Table 4.35) of question 18 asked about the importance of having a high level of proficiency in listening and speaking skills when “dealing with colleagues.” In regard to listening skills, 41 respondents (18.3 %) ranked it as the most important, 68 respondents (30.4 %) ranked it as the second most important, 80 respondents (35.7 %) ranked it third, 28 respondents (12.5 %) ranked it fourth and 7 respondents (3.1 %) ranked it fifth. For speaking skills, 52 respondents (23.4 %) ranked it as the most important, 53 respondents (23.9 %) ranked it as the second most important, 81 respondents (36.5 %) ranked it third, 27 respondents (12.2 %) ranked it fourth and 9 respondents (4.1 %) ranked it fifth.

Item C (Table 4.36) of question 18 asked about the importance of having a high level of proficiency in listening and speaking skills when having a “phone conversation.” In regard to listening skill, 44 respondents (19.8 %) ranked it as the most important, 62 respondents (27.9 %) ranked it as the second most important, 60 respondents (27.0 %) ranked it third, 44 respondents (19.8 %) ranked it fourth and 12 respondents (5.4 %) ranked it fifth. For speaking skills, 47 respondents (21.4 %) ranked it as the most important, 56 respondents (25.5 %) ranked it as the second most important, 64 respondents (29.1 %) ranked it third, 44 respondents (20.0 %) ranked it fourth and 9 respondents (4.1 %) ranked it fifth.

Item D (Table 4.37) of question 18 asked about the importance of having a high level of proficiency in reading and writing skills when dealing with “letters.” In regard to reading skills, 66 respondents (29.5 %) ranked it as the most important, 96 respondents (42.9 %) ranked it as

the second most important, 37 respondents (16.5 %) ranked it third, 17 respondents (7.6 %) ranked it fourth and 8 respondents (3.6 %) ranked it fifth. For writing skills, 60 respondents (26.8 %) ranked it as the most important, 85 respondents (37.9 %) ranked it as the second most important, 45 respondents (20.1 %) ranked it third, 23 respondents (10.3 %) ranked it fourth and 11 respondents (4.9 %) ranked it fifth.

Item E (Table 4.38) of question 18 asked about the importance of having a high level of proficiency in reading and writing skills when dealing with “memos.” In regard to reading skills, 66 respondents (29.7 %) ranked it as the most important, 84 respondents (37.8 %) ranked it as the second most important, 51 respondents (23.0 %) ranked it third, 12 respondents (5.4 %) ranked it fourth and 9 respondents (4.1 %) ranked it fifth. For writing skills, 53 respondents (24.0 %) ranked it as the most important, 87 respondents (39.4 %) ranked it as the second most important, 58 respondents (26.2 %) ranked it third, 16 respondents (7.2 %) ranked it fourth and 7 respondents (3.2 %) ranked it fifth.

Item F (Table 4.39) of question 18 asked about the importance of having a high level of proficiency in reading and writing skills when dealing with “emails and faxes.” In regard to reading skills, 65 respondents (29.1 %) ranked it as the most important, 83 respondents (37.2 %) ranked it as the second most important, 50 respondents (22.4 %) ranked it third, 13 respondents (5.8 %) ranked it fourth and 12 respondents (5.4 %) ranked it fifth. For writing skills, 63 respondents (28.4 %) ranked it as the most important, 76 respondents (34.2 %) ranked it as the second most important, 51 respondents (23.0 %) ranked it third, 18 respondents (8.1 %) ranked it fourth and 14 respondents (6.3 %) ranked it fifth.

Item G (Table 4.40) of question 18 asked about the importance of having a high level of proficiency in reading and writing skills when dealing with “research.” In regard to reading

skills, 116 respondents (51.6 %) ranked it as the most important, 58 respondents (25.8 %) ranked it as the second most important, 32 respondents (14.2 %) ranked it third, 10 respondents (4.4 %) ranked it fourth and 9 respondents (4.0 %) ranked it fifth. For writing skills, 101 respondents (45.5 %) ranked it as the most important, 65 respondents (29.3 %) ranked it as the second most important, 36 respondents (16.2 %) ranked it third, 10 respondents (4.5 %) ranked it fourth and 10 respondents (4.5 %) ranked it fifth.

Item H (Table 4.41) of question 18 asked about the importance of having a high level of proficiency in reading and writing skills when dealing with “forms and applications.” In regard to reading skills, 74 respondents (33.0 %) ranked it as the most important, 82 respondents (36.6 %) ranked it as the second most important, 48 respondents (21.4 %) ranked it third, 12 respondents (5.4 %) ranked it fourth and 8 respondents (3.6 %) ranked it fifth. For writing skills, 74 respondents (33.0 %) ranked it as the most important, 81 respondents (36.2 %) ranked it as the second most important, 49 respondents (21.9 %) ranked it third, 10 respondents (4.5 %) ranked it fourth and 10 respondents (4.5 %) ranked it fifth.

Item I (Table 4.42) of question 18 asked about the importance of having a high level of proficiency in reading and writing skills when dealing with “reports.” In regard to reading skills, 108 respondents (48.2 %) ranked it as the most important, 62 respondents (27.7 %) ranked it as the second most important, 27 respondents (12.1 %) ranked it third, 15 respondents (6.7 %) ranked it fourth and 12 respondents (5.4 %) ranked it fifth. For writing skills, 102 respondents (45.7 %) ranked it as the most important, 70 respondents (31.4 %) ranked it as the second most important, 24 respondents (10.8 %) ranked it third, 18 respondents (8.1 %) ranked it fourth and 9 respondents (4.0 %) ranked it fifth.

Item J (Table 4.43) of question 18 asked about the importance of having a high level of proficiency in reading and writing skills when “using computers.” In regard to reading skills, 66 respondents (29.5 %) ranked it as the most important, 86 respondents (38.4 %) ranked it as the second most important, 48 respondents (21.4 %) ranked it third, 16 respondents (7.1 %) ranked it fourth and 8 respondents (3.6 %) ranked it fifth. For writing skills, 70 respondents (31.4 %) ranked it as the most important, 71 respondents (31.8 %) ranked it as the second most important, 54 respondents (24.2 %) ranked it third, 21 respondents (9.4 %) ranked it fourth and 7 respondents (3.1 %) ranked it fifth.

Item K (Table 4.44) of question 18 asked about the importance of having a high level of proficiency in the four language skills when participating in “meetings.” In regard to listening skills, 94 respondents (45.0 %) ranked it as the most important, 70 respondents (33.5 %) ranked it as the second most important, 25 respondents (12.0 %) ranked it third, 11 respondents (5.3 %) ranked it fourth and 9 respondents (4.3 %) ranked it fifth. For speaking skills, 77 respondents (36.7 %) rank it as the most important, 76 respondents (36.2 %) ranked it as the second most important, 36 respondents (17.1 %) ranked it third, 9 respondents (4.3 %) ranked it fourth and 12 respondents (5.7 %) ranked it fifth. In regard to reading skills, 74 respondents (33.6 %) ranked it as the most important, 79 respondents (35.9 %) ranked it as the second most important, 36 respondents (16.4 %) ranked it third, 22 respondents (10.0 %) ranked it fourth and 9 respondents (4.1 %) ranked it fifth. For writing skills, 74 respondents (33.6 %) ranked it as the most important, 76 respondents (34.5 %) ranked it as the second most important, 42 respondents (19.1 %) ranked it third, 14 respondents (6.4 %) ranked it fourth and 14 respondents (6.4 %) ranked it fifth.

Item L (Table 4.45) of question 18 asked about the importance of having a high level of proficiency in the four language skills when dealing with “instructions and explanations.” In regard to listening skills, 83 respondents (38.4 %) ranked it as the most important, 77 respondents (35.6 %) ranked it as the second most important, 31 respondents (14.4 %) ranked it third, 21 respondents (9.7 %) ranked it fourth and 4 respondents (1.9 %) ranked it fifth. For speaking skills, 80 respondents (37.2 %) ranked it as the most important, 69 respondents (32.1 %) ranked it as the second most important, 43 respondents (20.0 %) ranked it third, 19 respondents (8.8 %) ranked it fourth and 4 respondents (1.9 %) ranked it fifth. In regard to reading skills, 77 respondents (34.7 %) ranked it as the most important, 75 respondents (33.8 %) ranked it as the second most important, 37 respondents (16.7 %) ranked it third, 26 respondents (11.7 %) ranked it fourth and 7 respondents (3.2 %) ranked it fifth. For writing skills, 66 respondents (29.7 %) ranked it as the most important, 78 respondents (35.1 %) ranked it as the second most important, 39 respondents (17.6 %) ranked it third, 25 respondents (11.3 %) ranked it fourth and 14 respondents (6.3 %) ranked it fifth.

Item M (Table 4.46) of question 18 asked about the importance of having a high level of proficiency in the four language skills when participating in “presentations.” In regard to listening skills, 101 respondents (46.5 %) ranked it as the most important, 69 respondents (31.8 %) ranked it as the second most important, 21 respondents (9.7 %) ranked it third, 17 respondents (7.8 %) ranked it fourth and 9 respondents (4.1 %) ranked it fifth. For speaking skills, 84 respondents (39.1 %) ranked it as the most important, 75 respondents (34.9 %) ranked it as the second most important, 33 respondents (15.3 %) ranked it third, 15 respondents (7.0 %) ranked it fourth and 8 respondents (3.7 %) ranked it fifth. In regard to reading skills, 87 respondents (39.2 %) ranked it as the most important, 71 respondents (32.0 %) ranked it as the

second most important, 34 respondents (15.3 %) ranked it third, 19 respondents (8.6 %) ranked it fourth and 11 respondents (5.0 %) ranked it fifth. For writing skills, 75 respondents (33.8 %) ranked it as the most important, 83 respondents (37.4 %) ranked it as the second most important, 26 respondents (11.7 %) ranked it third, 26 respondents (11.7 %) ranked it fourth and 12 respondents (5.4 %) ranked it fifth.

Item N of question 18 asked the respondents to write down any other activity that they thought was important to conduct their job and to evaluate the language skills involved in that activity in terms of the importance of having a high level of language proficiency. Only four participants responded to this question. Two of the four mentioned that they participate in “tests.” One of them ranked writing first, reading second, speaking third, and listening fourth. The other one ranked listening first, reading second, speaking third and writing fourth. The third participant mentioned that he/she participates in “continuous medical education.” This participant indicated that he/she needs a high level of proficiency in the four skills. The fourth participant mentioned that he/she participates in “advanced studies.” This participant also indicated that he/she needs a high level of proficiency in the four skills. However, since the number of respondents who participated in this item of the questionnaire was very limited, no generalizations can be made regarding the activities that they mentioned.

It was expected that a limited number will answer item N of the questionnaire since it requires the participants to put extra time and effort to think of an activity that they conduct. As mentioned previously, Dornyei (2003) and Oppenheim (1992) indicate that participants in questionnaires tend to ignore questions that require them to generate ideas especially when exceeding a 30-minute completion limit.

Table 4.8
Second Research Question and Its Sub-questions

Research Question	Sub questions with questionnaire items
<p>2- What level of the reading, writing, listening and speaking skills of the English language are required in the workplace and for performing what kind of activities?</p>	<p>1- Which of the skills (reading, writing, listening, and speaking) is more emphasized in the workplace? (items 13,14,15,16 and 17 in the questionnaire)</p> <p>2- What kind of activities are the four skills used for? (item 18 in the questionnaire)</p>

Table 4.9
Distribution of Frequencies and Percentages of the Required Level of Proficiency in Listening Skills to Perform the Job Effectively as Perceived by All Respondents

	Frequency	%
Excellent Level	141	62.7
Good Level	68	30.2
Satisfactory Level	15	6.7
N/A	1	0.4

Total responses = 225

Missing = 0

Table 4.10
Distribution of Frequencies and Percentages of the Required Level of Proficiency in Listening Skills to Perform the Job Effectively as Perceived by Physicians

	Frequency	%
Excellent Level	80	61.0
Good Level	44	33.5
Satisfactory Level	6	4.5
N/A	1	0.7

Total responses = 131

Missing = 0

Table 4.11
Distribution of Frequencies and Percentages of the Required Level of Proficiency in Listening
Skills to Perform the Job Effectively as Perceived by Dentists

	Frequency	%
Excellent Level	9	75
Good Level	3	25
Satisfactory Level	0	0
N/A	0	0

Total responses = 12

Missing = 0

Table 4.12
Distribution of Frequencies and Percentages of the Required Level of Proficiency in Listening Skills to Perform the Job Effectively as Perceived by Pharmacists

	Frequency	%
Excellent Level	21	58.3
Good Level	12	33.3
Satisfactory Level	3	8.3
N/A	0	0

Total responses = 36

Missing = 0

Table 4.13
Distribution of Frequencies and Percentages of the Required Level of Proficiency in Listening Skills to Perform the Job Effectively as Perceived by Applied Medical Technicians

	Frequency	%
Excellent Level	30	68.1
Good Level	8	18.1
Satisfactory Level	6	13.6
N/A	0	0

Total responses = 44

Missing = 0

Table 4.14
Distribution of Frequencies and Percentages of the Required Level of Proficiency in Speaking Skills to Perform the Job Effectively as Perceived by All Respondents

	Frequency	%
Excellent Level	132	58.7
Good Level	68	30.2
Satisfactory Level	23	10.2
N/A	2	0.9

Total responses = 225

Missing = 0

Table 4.15
Distribution of Frequencies and Percentages of the Required Level of Proficiency in Speaking Skills to Perform the Job Effectively as Perceived by Physicians

	Frequency	%
Excellent Level	69	52.6
Good Level	46	35.1
Satisfactory Level	15	11.4
N/A	1	0.7

Total responses = 131

Missing = 0

Table 4.16
Distribution of Frequencies and Percentages of the Required Level of Proficiency in Speaking
Skills to Perform the Job Effectively as Perceived by Dentists

	Frequency	%
Excellent Level	6	50
Good Level	6	50
Satisfactory Level	0	0
N/A	0	0

Total responses = 12

Missing = 0

Table 4.17
Distribution of Frequencies and Percentages of the Required Level of Proficiency in Speaking Skills to Perform the Job Effectively as Perceived by Pharmacists

	Frequency	%
Excellent Level	28	77.7
Good Level	7	19.4
Satisfactory Level	1	2.7
N/A	0	0

Total responses = 36

Missing = 0

Table 4.18
 Distribution of Frequencies and Percentages of the Required Level of Proficiency in Speaking
 Skills to Perform the Job Effectively as Perceived by Applied Medical Technicians

	Frequency	%
Excellent Level	28	63.6
Good Level	8	18.1
Satisfactory Level	7	15.9
N/A	1	2.2

Total responses = 44

Missing = 0

Table 4.19
Distribution of Frequencies and Percentages of the Required Level of Proficiency in Reading
Skills to Perform the Job Effectively as Perceived by All Respondents

	Frequency	%
Excellent Level	156	69.3
Good Level	50	22.2
Satisfactory Level	16	7.1
N/A	3	1.3

Total responses = 225

Missing = 0

Table 4.20
Distribution of Frequencies and Percentages of the Required Level of Proficiency in Reading Skills to Perform the Job Effectively as Perceived by Physicians

	Frequency	%
Excellent Level	95	72.5
Good Level	28	21.3
Satisfactory Level	7	5.3
N/A	1	0.7

Total responses = 131

Missing = 0

Table 4.21
Distribution of Frequencies and Percentages of the Required Level of Proficiency in Reading
Skills to Perform the Job Effectively as Perceived by Dentists

	Frequency	%
Excellent Level	9	75
Good Level	3	25
Satisfactory Level	0	0
N/A	0	0

Total responses = 12

Missing = 0

Table 4.22
Distribution of Frequencies and Percentages of the Required Level of Proficiency in Reading Skills to Perform the Job Effectively as Perceived by Pharmacists

	Frequency	%
Excellent Level	23	63.8
Good Level	10	27.7
Satisfactory Level	3	8.3
N/A	0	0

Total responses = 36

Missing = 0

Table 4.23
Distribution of Frequencies and Percentages of the Required Level of Proficiency in Reading Skills to Perform the Job Effectively as Perceived by Applied Medical Technicians

	Frequency	%
Excellent Level	28	63.6
Good Level	8	18.1
Satisfactory Level	6	13.6
N/A	2	4.5

Total responses = 44

Missing = 0

Table 4.24
Distribution of Frequencies and Percentages of the Required Level of Proficiency in Writing
Skills to Perform the Job Effectively as Perceived by All Respondents

	Frequency	%
Excellent Level	131	58.2
Good Level	72	32.0
Satisfactory Level	18	8.0
N/A	4	1.8

Total responses = 225

Missing = 0

Table 4.25
Distribution of Frequencies and Percentages of the Required Level of Proficiency in Writing
Skills to Perform the Job Effectively as Perceived by Physicians

	Frequency	%
Excellent Level	68	51.9
Good Level	51	38.9
Satisfactory Level	11	8.3
N/A	1	0.7

Total responses = 131

Missing = 0

Table 4.26
Distribution of Frequencies and Percentages of the Required Level of Proficiency in Writing
Skills to Perform the Job Effectively as Perceived by Dentists

	Frequency	%
Excellent Level	6	50
Good Level	6	50
Satisfactory Level	0	0
N/A	0	0

Total responses = 12

Missing = 0

Table 4.27
Distribution of Frequencies and Percentages of the Required Level of Proficiency in Writing
Skills to Perform the Job Effectively as Perceived by Pharmacists

	Frequency	%
Excellent Level	29	80.5
Good Level	6	16.6
Satisfactory Level	1	2.7
N/A	0	0

Total responses = 36

Missing = 0

Table 4.28
 Distribution of Frequencies and Percentages of the Required Level of Proficiency in Writing
 Skills to Perform the Job Effectively as Perceived by Applied Medical Technicians

	Frequency	%
Excellent Level	27	61.3
Good Level	8	18.1
Satisfactory Level	6	13.6
N/A	3	6.8

Total responses = 44

Missing = 0

Table 4.29
Distribution of Frequencies and Percentages of Ranking the Importance of the Four Language Skills as Perceived by All Respondents

Listening Skill

1 st Rank		2 nd Rank		3 rd Rank		4 th Rank	
Freq	%	Freq	%	Freq	%	Freq	%
65	29.3	77	34.7	57	25.7	23	10.4

Total responses = 225

Missing = 3

Speaking Skill

1 st Rank		2 nd Rank		3 rd Rank		4 th Rank	
Freq	%	Freq	%	Freq	%	Freq	%
42	19.4	65	30.1	58	26.9	51	23.6

Total responses = 225

Missing = 9

Reading Skill

1 st Rank		2 nd Rank		3 rd Rank		4 th Rank	
Freq	%	Freq	%	Freq	%	Freq	%
110	49.5	53	23.9	35	15.8	24	10.8

Total responses = 225

Missing = 3

Writing Skill

1 st Rank		2 nd Rank		3 rd Rank		4 th Rank	
Freq	%	Freq	%	Freq	%	Freq	%
9	4.2	31	14.5	63	29.4	111	51.9

Total responses = 225

Missing = 11

Table 4.30
Distribution of Frequencies and Percentages of Ranking the Importance of the Four Language Skills as Perceived by Physicians

Listening Skill

1 st Rank		2 nd Rank		3 rd Rank		4 th Rank	
Freq	%	Freq	%	Freq	%	Freq	%
39	30	47	36.1	35	26.9	9	6.9

Total responses = 131

Missing = 1

Speaking Skill

1 st Rank		2 nd Rank		3 rd Rank		4 th Rank	
Freq	%	Freq	%	Freq	%	Freq	%
51	39.2	33	25.3	26	20	20	15.3

Total responses = 131

Missing = 1

Reading Skill

1 st Rank		2 nd Rank		3 rd Rank		4 th Rank	
Freq	%	Freq	%	Freq	%	Freq	%
35	27.1	36	27.9	32	24.8	26	20.1

Total responses = 131

Missing = 2

Writing Skill

1 st Rank		2 nd Rank		3 rd Rank		4 th Rank	
Freq	%	Freq	%	Freq	%	Freq	%
46	36.2	17	13.3	35	27.5	29	22.8

Total responses = 131

Missing = 4

Table 4.31
Distribution of Frequencies and Percentages of Ranking the Importance of the Four Language Skills as Perceived by Dentists

Listening Skill

1 st Rank		2 nd Rank		3 rd Rank		4 th Rank	
Freq	%	Freq	%	Freq	%	Freq	%
6	54.5	2	18.1	0	0	3	27.2

Total responses = 12

Missing = 1

Speaking Skill

1 st Rank		2 nd Rank		3 rd Rank		4 th Rank	
Freq	%	Freq	%	Freq	%	Freq	%
5	45.4	4	36.3	1	9	1	9

Total responses = 12

Missing = 1

Reading Skill

1 st Rank		2 nd Rank		3 rd Rank		4 th Rank	
Freq	%	Freq	%	Freq	%	Freq	%
0	0	2	33.3	2	33.3	2	33.3

Total responses = 12

Missing = 6

Writing Skill

1 st Rank		2 nd Rank		3 rd Rank		4 th Rank	
Freq	%	Freq	%	Freq	%	Freq	%
0	0	1	16.6	3	50	2	33.3

Total responses = 12

Missing = 6

Table 4.32
Distribution of Frequencies and Percentages of Ranking the Importance of the Four Language Skills as Perceived by Pharmacists

Listening Skill

1 st Rank		2 nd Rank		3 rd Rank		4 th Rank	
Freq	%	Freq	%	Freq	%	Freq	%
10	27.7	12	33.3	12	33.3	2	5.5

Total responses = 36

Missing = 0

Speaking Skill

1 st Rank		2 nd Rank		3 rd Rank		4 th Rank	
Freq	%	Freq	%	Freq	%	Freq	%
20	55.5	8	22.2	6	16.6	2	5.5

Total responses = 36

Missing = 0

Reading Skill

1 st Rank		2 nd Rank		3 rd Rank		4 th Rank	
Freq	%	Freq	%	Freq	%	Freq	%
6	16.6	8	22.2	8	22.2	14	38.8

Total responses = 36

Missing = 0

Writing Skill

1 st Rank		2 nd Rank		3 rd Rank		4 th Rank	
Freq	%	Freq	%	Freq	%	Freq	%
0	0	11	30.5	9	25	16	44.4

Total responses = 36

Missing = 0

Table 4.33
Distribution of Frequencies and Percentages of Ranking the Importance of the Four Language Skills as Perceived by Applied Medical Technicians

Listening Skill

1 st Rank		2 nd Rank		3 rd Rank		4 th Rank	
Freq	%	Freq	%	Freq	%	Freq	%
9	20.9	15	34.8	10	23.2	9	20.9

Total responses = 44

Missing = 1

Speaking Skill

1 st Rank		2 nd Rank		3 rd Rank		4 th Rank	
Freq	%	Freq	%	Freq	%	Freq	%
32	74.4	8	18.6	2	4.6	1	2.3

Total responses = 44

Missing = 1

Reading Skill

1 st Rank		2 nd Rank		3 rd Rank		4 th Rank	
Freq	%	Freq	%	Freq	%	Freq	%
1	2.3	19	44.1	14	32.5	9	20.9

Total responses = 44

Missing = 1

Writing Skill

1 st Rank		2 nd Rank		3 rd Rank		4 th Rank	
Freq	%	Freq	%	Freq	%	Freq	%
2	4.6	2	4.6	16	37.2	23	53.4

Total responses = 44

Missing = 1

Table 4.34
Dealing with Patients

	Listening		Speaking	
	Freq	%	Freq	%
Most Important	30	13.4	24	10.8
Second Most	17	7.6	16	7.2
Third	26	11.6	27	12.1
Fourth	68	30.4	53	23.8
Least Important	83	37.1	103	46.2

Table 4.35
Dealing with Colleagues

	Listening		Speaking	
	Freq	%	Freq	%
Most Important	41	18.3	52	23.4
Second Most	68	30.4	53	23.9
Third	80	35.7	81	36.5
Fourth	28	12.5	27	12.2
Least Important	7	3.1	9	4.1

Table 4.36
Phone Conversation

	Listening		Speaking	
	Freq	%	Freq	%
Most Important	44	19.8	47	21.4
Second Most	62	27.9	56	25.5
Third	60	27.0	64	29.1
Fourth	44	19.8	44	20.0
Least Important	12	5.4	9	4.1

Table 4.37
Letters

	Reading		Writing	
	Freq	%	Freq	%
Most Important	66	29.5	60	26.8
Second Most	96	42.9	85	37.9
Third	37	16.5	45	20.1
Fourth	17	7.6	23	10.3
Least Important	8	3.6	11	4.9

Table 4.38
Memos

	Reading		Writing	
	Freq	%	Freq	%
Most Important	66	29.7	53	24.0
Second Most	84	37.8	87	39.4
Third	51	23.0	58	26.2
Fourth	12	5.4	16	7.2
Least Important	9	4.1	7	3.2

Table 4.39
Emails and Faxes

	Reading		Writing	
	Freq	%	Freq	%
Most Important	65	29.1	63	28.4
Second Most	83	37.2	76	34.2
Third	50	22.4	51	23.0
Fourth	13	5.8	18	8.1
Least Important	12	5.4	14	6.3

Table 4.40
Research

	Reading		Writing	
	Freq	%	Freq	%
Most Important	116	51.6	101	45.5
Second Most	58	25.8	65	29.3
Third	32	14.2	36	16.2
Fourth	10	4.4	10	4.5
Least Important	9	4.0	10	4.5

Table 4.41
Forms and Applications

	Reading		Writing	
	Freq	%	Freq	%
Most Important	74	33.0	74	33.0
Second Most	82	36.6	81	36.2
Third	48	21.4	49	21.9
Fourth	12	5.4	10	4.5
Least Important	8	3.6	10	4.5

Table 4.42
Reports

	Reading		Writing	
	Freq	%	Freq	%
Most Important	108	48.2	102	45.7
Second Most	62	27.7	70	31.4
Third	27	12.1	24	10.8
Fourth	15	6.7	18	8.1
Least Important	12	5.4	9	4.0

Table 4.43
Using Computers

	Reading		Writing	
	Freq	%	Freq	%
Most Important	66	29.5	70	31.4
Second Most	86	38.4	71	31.8
Third	48	21.4	54	24.2
Fourth	16	7.1	21	9.4
Least Important	8	3.6	7	3.1

Table 4.44
Meetings

	Listening		Speaking		Reading		Writing	
	Freq	%	Freq	%	Freq	%	Freq	%
Most Important	94	45.0	77	36.7	74	33.6	74	33.6
Second Most	70	33.5	76	36.2	79	35.9	76	34.5
Third	25	12.0	36	17.1	36	16.4	42	19.1
Fourth	11	5.3	9	4.3	22	10.0	14	6.4
Least Important	9	4.3	12	5.7	9	4.1	14	6.4

Table 4.45
Instructions and Explanations

	Listening		Speaking		Reading		Writing	
	Freq	%	Freq	%	Freq	%	Freq	%
Most Important	83	38.4	80	37.2	77	34.7	66	29.7
Second Most	77	35.6	69	32.1	75	33.8	78	35.1
Third	31	14.4	43	20.0	37	16.7	39	17.6
Fourth	21	9.7	19	8.8	26	11.7	25	11.3
Least Important	4	1.9	4	1.9	7	3.2	14	6.3

Table 4.46
Presentations

	Listening		Speaking		Reading		Writing	
	Freq	%	Freq	%	Freq	%	Freq	%
Most Important	101	46.5	84	39.1	87	39.2	75	33.8
Second Most	69	31.8	75	34.9	71	32.0	83	37.4
Third	21	9.7	33	15.3	34	15.3	26	11.7
Fourth	17	7.8	15	7.0	19	8.6	26	11.7
Least Important	9	4.1	8	3.7	11	5.0	12	5.4

Results of the Third Research Question

The results of the data from item 19 to item 22 of the questionnaire provide answers to the third research question:

Do graduates of the medical colleges feel that they were prepared in terms of their English language ability to meet their current communication needs?

The questions in this part asked about participants' language experiences with the English language before they joined the workplace. Table 4.47 represents an overview of the first research question along with its sub-questions and questionnaire items.

Item 19 (Table 4.48) of the questionnaire asked the respondents to rate their knowledge of the English language before they started college. This question used a Likert scale with the following values: "very good," "satisfactory," "poor", and "very poor." In their response to this question, 42 respondents (18.7 %) reported that their knowledge of English before they began college was "very good," 131 respondents (58.2%) reported that their knowledge of English was "satisfactory." 42 respondents (18.7%) reported that their knowledge of English was "poor" and 10 respondents (4.4 %) reported that their knowledge of English was "very poor."

Item 20 of the questionnaire asked the respondents how the English language courses that they took in college helped them in different tasks. They were asked to rate six different tasks on a Likert scale with the following values: "a lot," "somewhat," "a little", and "did not help at all."

In regard to the first task (Table 4.49), 61 respondents (27.4 %) reported that the English courses helped them "a lot" to "speak about medical related topics in English." 113 respondents (50.7 %) reported that the English courses helped them "somewhat." 43 respondents (19.3 %) reported that the English courses helped them "a little" and 6 respondents (2.7 %) reported that the English courses "did not help at all."

For the second task (Table 4.50), 50 respondents (22.3 %) reported that the English courses helped them “a lot” to “write about medical related topics in English.” 88 respondents (39.3 %) reported that the courses helped them “somewhat.” 74 respondents (33.0 %) reported that the courses helped them “a little” and 12 respondents (5.4 %) reported that the courses “did not help at all.”

In the third task (Table 4.51), 53 respondents (23.8 %) reported that the English courses helped them “a lot” to “read medical related books, articles, and magazines.” 91 respondents (40.8 %) reported that the courses helped them “somewhat.” 65 respondents (29.1 %) reported that the courses helped them “a little” and 14 respondents (6.3 %) reported that the courses “did not help at all.”

In the fourth task (Table 4.52), 53 respondents (23.8 %) reported that the English courses helped them “a lot” to “understand medical related instructions, lectures, and homework”. 100 respondents (44.8 %) reported that the courses helped them “somewhat.” 61 respondents (27.4 %) reported that the courses helped them “a little” and 9 respondents (4.0 %) reported that the courses “did not help at all.”

In the fifth task (Table 4.53), 34 respondents (15.3 %) reported that the English courses helped them “a lot” to “translate medical related materials.” 84 respondents (37.8 %) reported that the courses helped them “somewhat.” 83 respondents (37.4 %) reported that the courses helped them “a little” and 21 respondents (9.5 %) reported that the courses “did not help at all.”

In the last task (Table 4.54), 34 respondents (15.3 %) reported that the English courses helped them “a lot” to “pass English language examination.” 93 respondents (41.9 %) reported that the courses helped them “somewhat.” 78 respondents (35.1 %) reported that the courses helped them “a little” and 17 respondents (7.7 %) reported that the courses “did not help at all.”

Item 21 of the questionnaire (Table 4.55) asked the respondents how relevant the English language courses that they took in college were to their medical needs. This question implemented a Likert scale with the following values: “a lot,” “somewhat,” “a little,” and “not relevant at all.” In their response to this question, 52 respondents representing 23.9 % of the sample population reported that the courses that they took in college were relevant “a lot” to their medical needs. 116 respondents (53.2%) reported that the courses were “somewhat” relevant. 40 respondents (18.3%) reported that the courses were “a little” relevant and only 10 respondents (4.6 %) reported that the courses were “not relevant at all.”

Item 22 of the questionnaire (Table 4.56) asked the respondents to rate their knowledge of the English language after they graduated from college. This question implemented a Likert scale with the following values: “very good,” “satisfactory,” “poor,” and “very poor.” In their response to this question, 104 respondent representing 47.5 % of the sample population reported that their knowledge of English after they graduated from college was “very good.” 108 respondents (49.3 %) reported that their knowledge of English was “satisfactory.” 6 respondents (2.7 %) reported that their knowledge of English was “poor” and only 1 respondent (0.5 %) reported that his/her knowledge of English was “very poor.”

In conclusion, the results for this part of the questionnaire revealed the respondents’ perception of their English language experience before they joined college, during their college study, and after they graduated from college. The aim was to get their overall perception of their experience with the English language before joining the workplace. All these results along with the other results from the previous research questions will be discussed in the following chapter.

Table 4.47
Third Research Question and its Sub-questions

Research Question	Sub questions with questionnaire items
<p>3- Do graduates of the medical colleges feel that they were prepared in terms of their English language ability to meet their current communication needs?</p>	<ol style="list-style-type: none"> 1- How do health professionals perceive their English language ability before and after college? (items 19 and 22 in the questionnaire) 2- Are the English language courses at college relevant to the activities performed in the workplace? (item 20 in the questionnaire) 3- Do health professionals feel that the English language courses at the college level are based on medical English? (item 21 in the questionnaire)

Table 4.48
Distribution of Frequencies and Percentages of Rating the Knowledge of English before Starting
College

	Frequency	%
Very Good	42	18.7
Satisfactory	131	58.2
Poor	42	18.7
Very Poor	10	4.4

Total responses = 225

Missing = 0

Table 4.49
Distribution of Frequencies and Percentages of the Help Gained from English Language Courses
at the College Level to “speak about medical related topics in English”

	Frequency	%
A lot	61	27.4
Somewhat	113	50.7
A little	43	19.3
Did not help at all	6	2.7

Total responses = 225

Missing = 2

Table 4.50
Distribution of Frequencies and Percentages of the Help Gained from English Language Courses
at the College Level to “write about medical related topics in English”

	Frequency	%
A lot	50	22.3
Somewhat	88	39.3
A little	74	33.0
Did not help at all	12	5.4

Total responses = 225

Missing = 1

Table 4.51
Distribution of Frequencies and Percentages of the Help Gained from English Language Courses
at the College Level to “read medical related books, articles, and magazines”

	Frequency	%
A lot	53	23.8
Somewhat	91	40.8
A little	65	29.1
Did not help at all	14	6.3

Total responses = 225

Missing = 2

Table 4.52
Distribution of Frequencies and Percentages of the Help Gained from English Language Courses
at the College Level to “understand medical related instructions, lectures, and homework”

	Frequency	%
A lot	53	23.8
Somewhat	100	44.8
A little	61	27.4
Did not help at all	9	4.0

Total responses = 225

Missing = 2

Table 4.53
Distribution of Frequencies and Percentages of the Help Gained from English Language Courses
at the College Level to “translate medical related materials”

	Frequency	%
A lot	34	15.3
Somewhat	84	37.8
A little	83	37.4
Did not help at all	21	9.5

Total responses = 225

Missing = 3

Table 4.54
Distribution of Frequencies and Percentages of the Help Gained from English Language Courses
at the College Level to “pass English language examination”

	Frequency	%
A lot	34	15.3
Somewhat	93	41.9
A little	78	35.1
Did not help at all	17	7.7

Total responses = 225

Missing = 3

Table 4.55
Distribution of Frequencies and Percentages of the Relevancy between the English Language
Courses at the College Level and Medical Needs

	Frequency	%
A lot	52	23.9
Somewhat	116	53.2
A little	40	18.3
Not relevant at all	10	4.6

Total responses = 225

Missing = 7

Table 4.56
Distribution of Frequencies and Percentages of Rating the Knowledge of English after
Graduating from College

	Frequency	%
Very Good	104	47.5
Satisfactory	108	49.3
Poor	6	2.7
Very Poor	1	0.5

Total responses = 225

Missing = 6

CHAPTER FIVE

DISCUSSION, AND RECOMMENDATIONS

This chapter is divided into two parts. The first part discusses the findings of the research questions and draws implications. The second part presents recommendations based on the results and provides suggestions for future research.

Discussion and conclusions

First Research Question:

To what extent is the English language used in the careers of medical professionals at hospitals in the Riyadh area?

The respondents were asked about their perceived percentage of using English in the workplace and about their perceived importance of having a high level of English proficiency to perform the job. In regard to language use situations, the respondents were asked about using English in medical training and using English with English speaking coworkers.

Most respondents reported that they used English a high percentage of the time to communicate at the workplace. The average estimate was 77.3%. It is obvious that the English language plays an important role in their professional life. An important question in this regard is whether English use varies in the different fields of the participants. The data indicate that physicians' average estimate was 87.8 %, pharmacists' estimate was 70.2 %, applied medical specialists' estimate was 67.09 %, and dentists' estimate was 84.8 % (chart 5.1). In other words,

physicians and dentists believe they use English more often than pharmacists and applied medical specialists. Therefore, this difference in the amount of English used by health professionals should be reflected in language courses at the college level.

The extent of English language use is also reflected in the respondents' medical training courses (chart 5.2). In this highly specialized situation, 80.4% of the respondents who indicated that they took medical training courses expressed that English is the only language used in these courses. This indicates that English is not only extensively used while they are conducting their jobs, but is also crucial to the continuing development of their medical skills. However, it is interesting to notice here that 71.0% expressed that they did not take any medical training course while on the job. In reviewing the profile of the respondents, the researcher found that 75.6% of the respondents graduated recently between 1999 and 2004. Perhaps recent graduates are less likely to take on-the-job training courses. What is significant is that once a health professional take a medical training course, the English language is heavily used.

When respondents were asked whether they have coworkers who communicate in English only, 71.6% said "yes" which is in itself a good indication that English is used extensively. When these respondents were asked how often the nature of the job requires them to communicate with English speaking coworkers, the majority of respondents chose the highest available choice in the questionnaire "a lot" representing 94.4 % (chart 5.3). This shows that the majority of the respondents communicate heavily with coworkers using the English language.

From this conclusion, the researcher can safely predict that students in medical professions will find themselves working in a multilingual environment where English is used extensively. This will require them to use the English language as their tool of communication in order to conduct their jobs. Thus, these data suggest that college English language courses for

future medical professionals need to focus more on fluency and understanding rather than accuracy and structure. Since this environment also represents many multicultural as well as multilingual situations with co-workers from all around the world, cultural interaction ought to be considered when designing a curriculum to prepare students for their future careers.

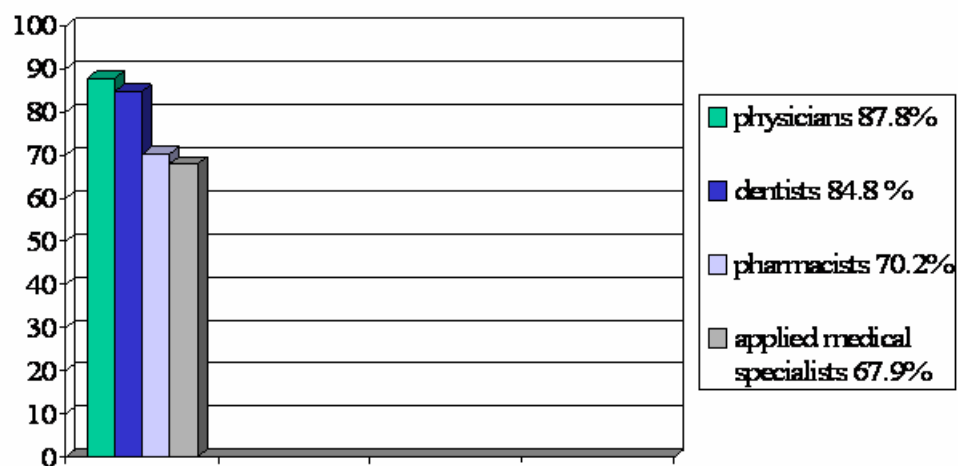
Finally, when respondents were asked about the importance of having a high level of English proficiency to perform the job (chart 5.4), the majority of the respondents asserted that it is very important to have a high level of English proficiency to perform the job.

Only one respondent indicated that English is not important at all. This respondent was an applied medical specialist. This field includes nursing, physical therapy, dental hygiene, nutrition, x-ray & medical technology, and clinical laboratory science. While the respondent did not indicate his/her exact specialty, one way of explaining his/her response is that he/she might be performing a mechanical job that requires little verbal communication.

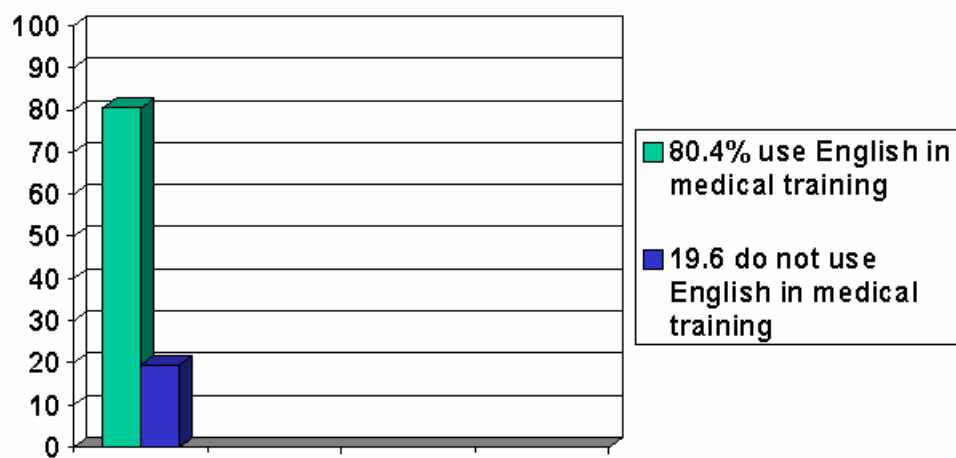
When looking at responses in terms of professions, the majority of respondents in all professions indicated that English is very important. Nevertheless, 88.8% of physicians (chart 5.5) perceived English as very important, 83.3% of dentists (chart 5.6) perceived English as very important, 67.9% of pharmacists (chart 5.7) perceived English as very important, and 75.0% of applied medical specialists (chart 5.8) perceived English as very important. This confirms the previous discussion that physicians and dentists use English more than the other fields of the medical professions. The following charts show these percentages.

In conclusion, the results were consistent in pointing out heavy usage of the English language in Saudi medical professions. This implies that effective English language instruction is greatly needed to perform the job effectively and therefore plays an important role in the careers of health professionals.

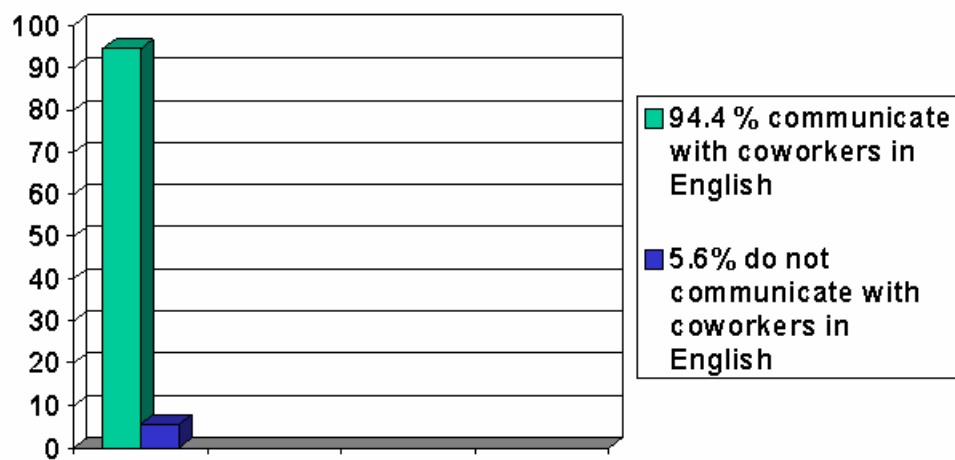
The perceived percentage of using English in the workplace
Chart 5.1



Using English in medical training
chart 5.2



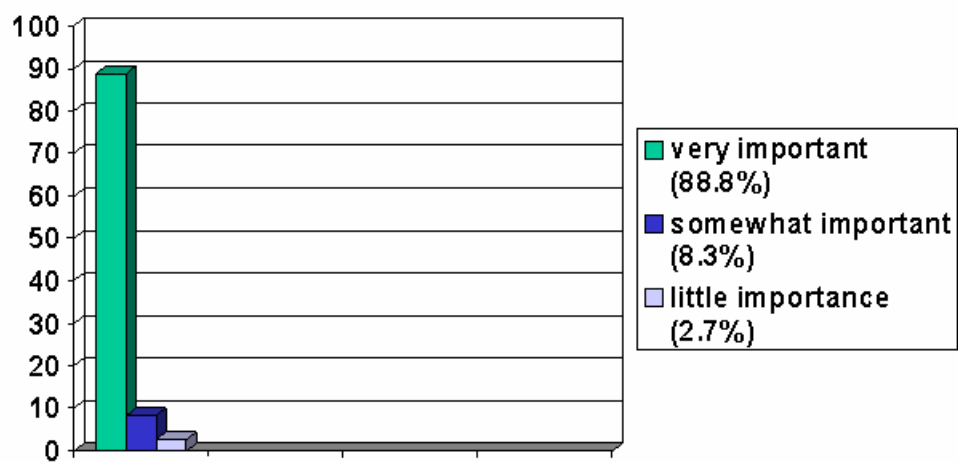
Communication with coworkers in English
chart 5.3



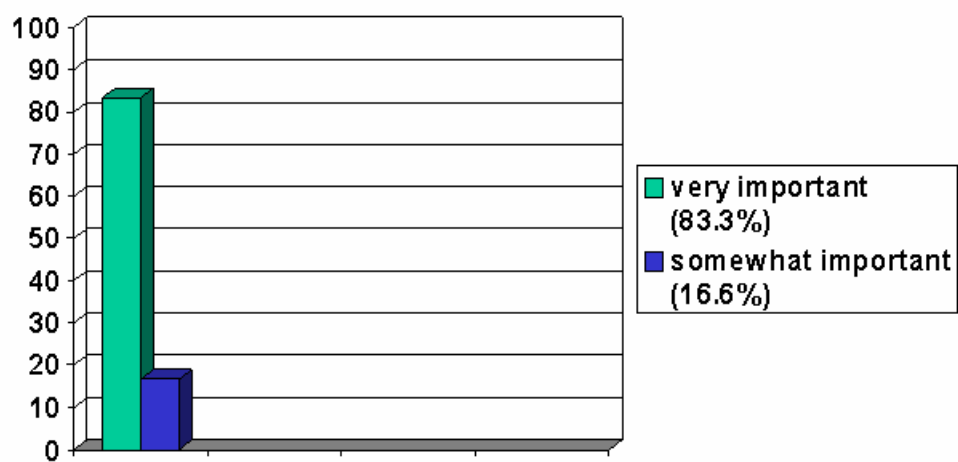
The importance of the English language as perceived by all participants
chart 5.4



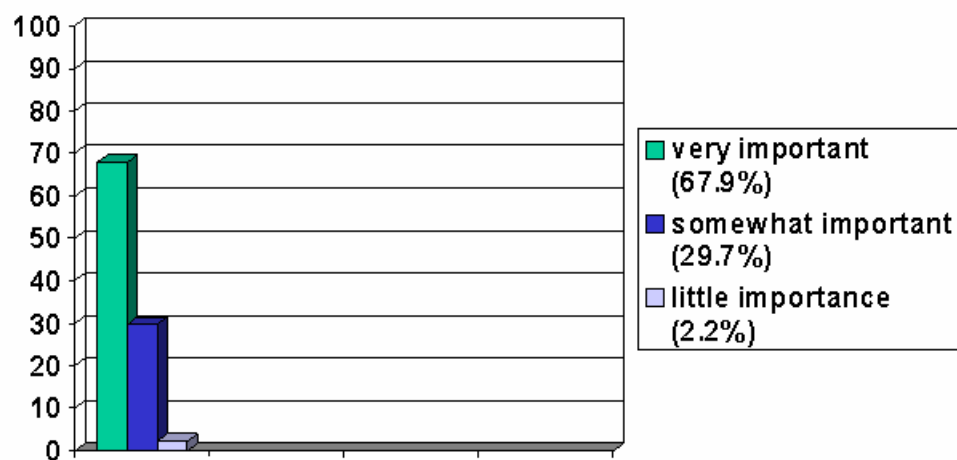
The importance of the English language as perceived by physicians
chart 5.5



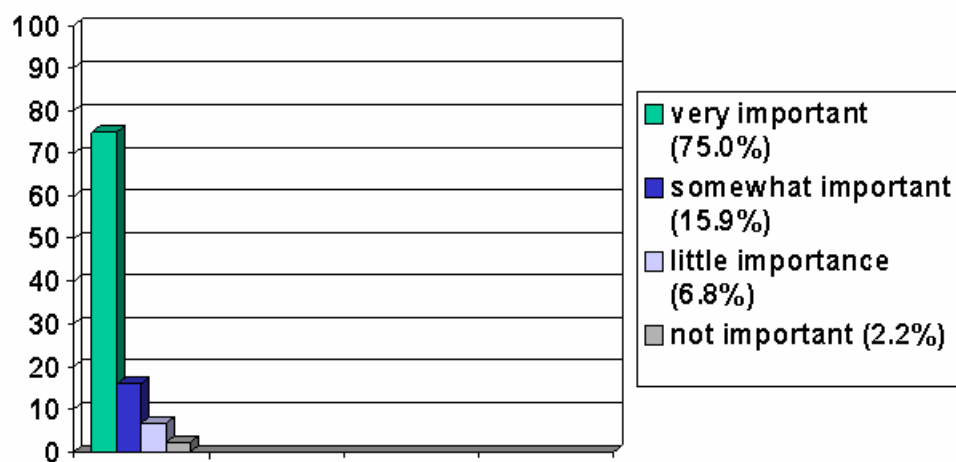
The importance of the English language as perceived by dentists
chart 5.6



The importance of the English language as perceived by pharmacists
chart 5.7



The importance of the English language as perceived by applied medical specialists
chart 5.8



Second Research Question:

What level of the reading, writing, listening and speaking skills of the English language are required in the workplace and for performing what kind of activities?

The data show that there is considerable agreement among the respondents about the relative importance of proficiency in English reading, writing, speaking, and listening. For each of the four skills, an “excellent level” received the majority of responses. This indicates that a high command is needed in all skills. However, reading skills were most often viewed as requiring an excellent level to perform the job (69.3 %). Listening skills were very close at 62.7 %. Speaking and writing skills were marginal lower (58.7 % and 58.2 % respectively). Thus, receptive skills were perceived as a bit more important than the productive skills to perform the job effectively. Chart 5.9 illustrates these percentages of the perceived perception towards the importance of the four skills.

The cross check question (item 17 of the questionnaire) where the respondents were asked to rank the four skills in terms of their importance, received similar responses. Reading was ranked as the most important skill by 49.5 % of respondents followed by listening at 29.3 % and speaking at 19.4 %. Writing received 4.2 % as the least important skill. Chart 5.10 represents these percentages of the cross check question.

Since reading and listening are ranked more highly across items, it can be concluded that proficiency in English receptive skills (reading and listening) are perceived as more important than productive skills (speaking and writing). This is logical given the nature of the medical profession. Dealing with people’s health requires a great level of understanding regarding different medical conditions, procedures, instructions, and the nature of medicine and diseases. This information tends to be presented and published internationally in English. Whether this

knowledge is received through reading or listening, it is crucial to adequately operate on patients. What strengthens this claim is that the English language is used as the tool of instruction at the college level and at hospital training.

The study also looked at the English skill level needed to perform specific medical activities. These can be divided into three groups. The first group is associated with the listening and speaking skills, the second with reading and writing skills, and the third is associated with all four language skills.

In regard to listening and speaking skills, three activities were examined. The first was “dealing with patients.” Approximately two thirds of the respondents placed a low value of importance in using the listening and speaking skills to conduct this activity (67.5% representing the lowest two degrees of the scale). In other words, the respondents did not consider having a high level of English knowledge to be important when dealing with patients. This makes sense since it is probable that patients are mainly Arab speakers and there is no requirement for English to deal with them. The second and third activities dealt with “dealing with colleagues” and “phone conversations.” In these two activities, most of the respondents placed a high degree of importance on listening (48.2 %) and speaking (47.1 %) when dealing with colleagues or when having phone conversations. Chart 5.11 represents these percentages of the perceived perception of these two activities.

This implies that these two activities frequently involve non Arabic speakers so require a high level of proficiency in English listening and speaking. Thus, it suggests the potential importance of a listening and speaking course at the college level that contains dialogues representing interaction with colleagues. Such dialogue should also cover the particular demands

of phone conversations when there are no visual clues to aid comprehension instead of traditional courses in listening and speaking that focus on pronouncing individual words.

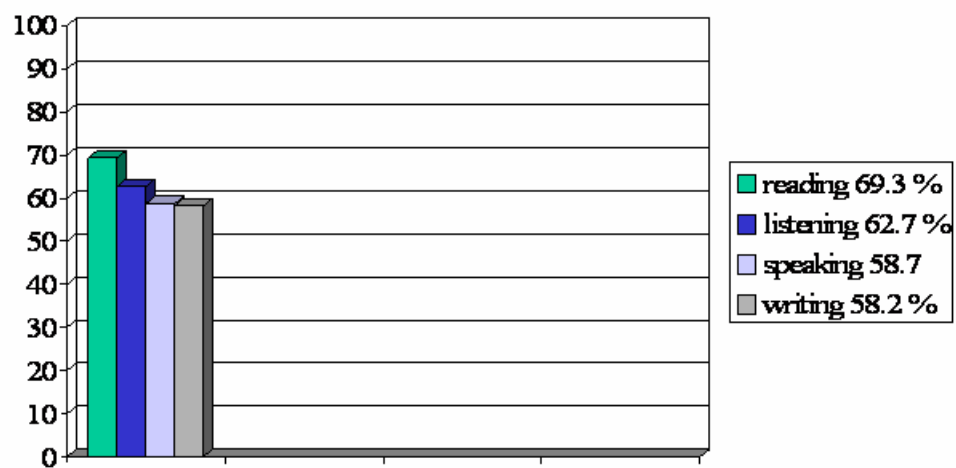
In the group of activities associated with reading and writing skills, seven activities were examined. They were concerned with “letters,” “memos,” “email and faxes,” “research,” “forms and applications,” “reports,” and “using computers.” The vast majority of the respondents felt it was important to have a high level of proficiency in reading and writing skills to conduct these activities. This suggests that students in medical professions need to acquire a high level of the reading and writing skills to be prepared for their professional lives. A point of consideration when discussing these activities is the degree of importance that the respondents placed on the reading and the writing skills of these activities. Except for the activity of “dealing with forms and applications”, the respondents always placed a higher level of importance on reading skill. This point is better illustrated when calculating the highest two values in these seven activities where reading was perceived more important and received 71.1 % of the respondents’ perception, while writing received 67.6 %. Chart 5.12 represents these percentages after calculating the highest two values of the respondents’ perception towards reading and writing skills.

The data suggest that the respondents consider reading skills to be more important than writing skills. This is consistent with the earlier discussion of placing a higher value on receptive skills than productive skills. Though this would suggest that English programs designed to prepare medical students need to intensify the focus on receptive skills, the differences in percentages between receptive and productive skills are so close that it is hard to make a strong judgment in this regard.

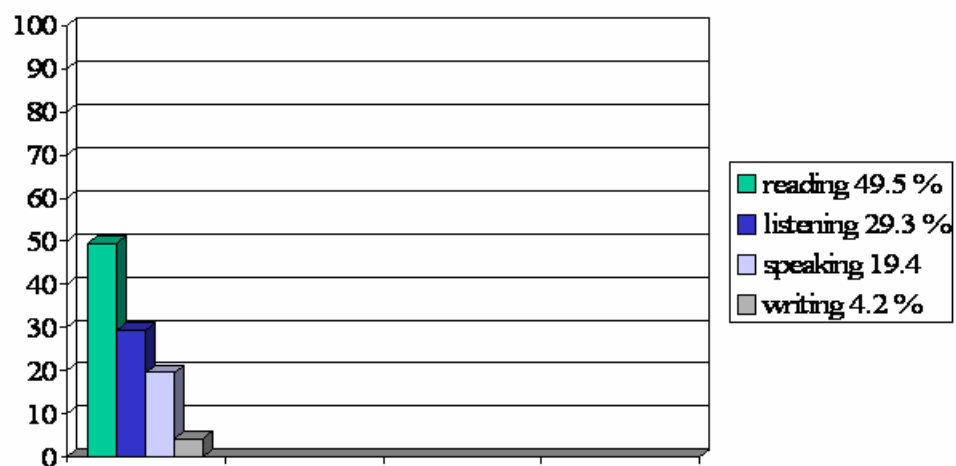
The last group of activities is associated with all four English language skills. The activities in this group were concerned with “meetings,” “instructions and explanations,” and “presentations.” Results for this group of activities were less clear cut. The vast majority of respondents highly ranked the importance of having a high level of proficiency in the four skills to conduct these activities. However, in these activities comparing receptive skills with productive skills was not entirely consistent. Listening skills received the highest ranking among the four English language skills in all three activities. The other three skills were highly rated but had no considerable difference in importance when compared to each other. Chart 5.13 represents the percentages of the three activities after calculating the two highest values chosen by the respondents.

In conclusion, respondents considered all English language skills to be important to conduct their jobs effectively. Though receptive skills were viewed as more important than productive skills, the percentages were so close that it is hard to prioritize any skill area over others. Not all activities require a high knowledge of the English language, however. Therefore, activities in an English program should reflect situations similar to what the medical students will encounter in their future careers. For example, reading and writing courses should use authentic materials from the medical environment representing each profession instead of using generic materials covering the whole range of the medical field. Listening and speaking courses should contain dialogues instead of individual word repetition.

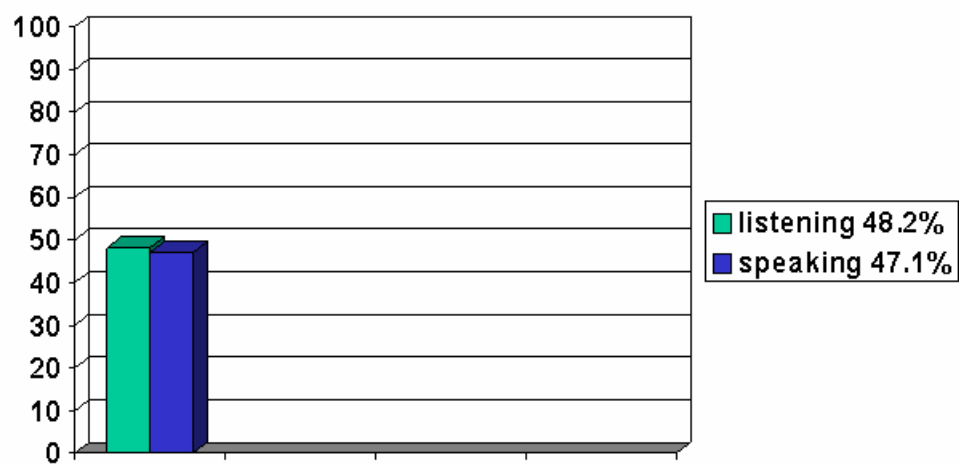
The required level of proficiency in the four skills to perform the job effectively
chart 5.9



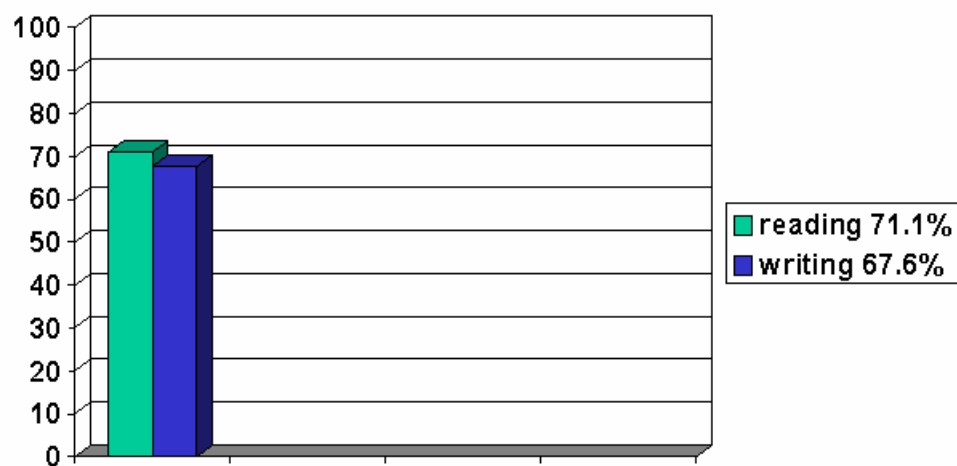
The importance of the four language skills as perceived by the respondents
chart 5.10



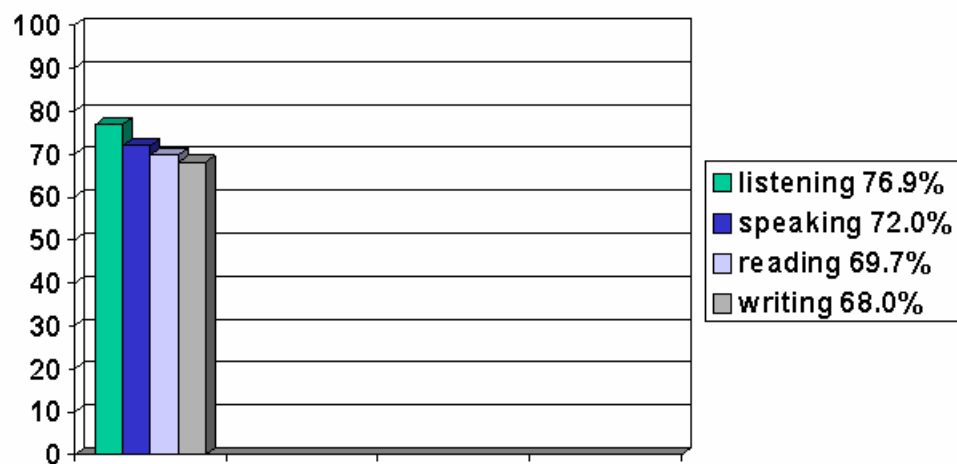
The perceived importance of using the listening and speaking skills when “dealing with colleagues” and having “phone conversations”
chart 5.11



The perceived importance of using the reading and writing skills when dealing with "letters", "memos", "email and faxes", "research", "reports", and "using computers"
chart 5.12



The perceived importance of using the four skills when dealing with “meetings”, “instructions and explanations”, and “presentations”
chart 5.13



Third Research Question:

Do graduates of the medical colleges feel that they were prepared in terms of their English language ability to meet their current communication needs?

In discussing the results of this research question, the focus will be on three points: (1) the respondents' experience with the English language before they began college; (2) the respondents' experience with the English language during their college studies; and (3) the respondents' experience with the English language after they graduated from college and joined the medical profession.

The data reveal that most respondents felt that their English language proficiency before they began college was average but not outstanding. It is worth mentioning here that the respondents studied English in public school for three years at the intermediate level and another three years at the secondary level of public education. Yet after six years only 18.7% of the respondents felt that their English was "very good." Most of the respondents (58.2 %) felt it was "satisfactory." Interestingly enough, most studies in Saudi Arabia indicate that Saudi students graduate from high school with an even poorer grasp of English than these students reported (Almulhim, 2001; Al-Gorashi, 1988; Ministry of Education, 1984; Al-Kamookh, 1981). One way of explaining this is that secondary school graduates are required to have high scores in their standardized tests in the subject area of the English language in order to get accepted to the medical colleges. Respondents of this study were likely among the top of their classes in public education. Since no previous study has dealt specifically with medical students, it is not surprising that this study had different findings in this regard. Another way of explaining this finding is that most previous studies were conducted many years ago. In the past decade the world has become smaller and opportunities for English exposure much greater with the

introduction of the Internet and satellite TV. Therefore the participants of this study most likely had more exposure to the English language than the previous generation. Chart 5.14 represents the perceived English language proficiency before college.

The second part of this discussion is concerned with the respondents' perception of their experience with the English language during their college studies (item 20 in the questionnaire). The respondents were presented with different tasks that represented different medically related topics and they were asked to rate how helpful these tasks were to serve their English language medical needs.

Based on the range of the grand mean of all answers as illustrated in chart 5.15, the majority of the respondents felt that the English courses that they took during their college study were "somewhat" helpful or helpful "a little." Since these courses are intended specifically for students in medical professions, their rating for the English courses is rather negative. In other words, the results suggest that the English language courses were insufficient to help them conduct medical tasks effectively.

Likewise, the majority of the respondents felt that the English courses were "somewhat" relevant to their current medical needs or relevant "a little" to their medical needs as presented in chart 5.16.

This finding suggests that the curriculum of English language courses at the college level were not adequately defined in terms of the medical students' future occupational needs. The context of the medical field requires a high level of English communicative skills since these professionals deal with patients' lives. Communication skills literally have "life or death" consequences.

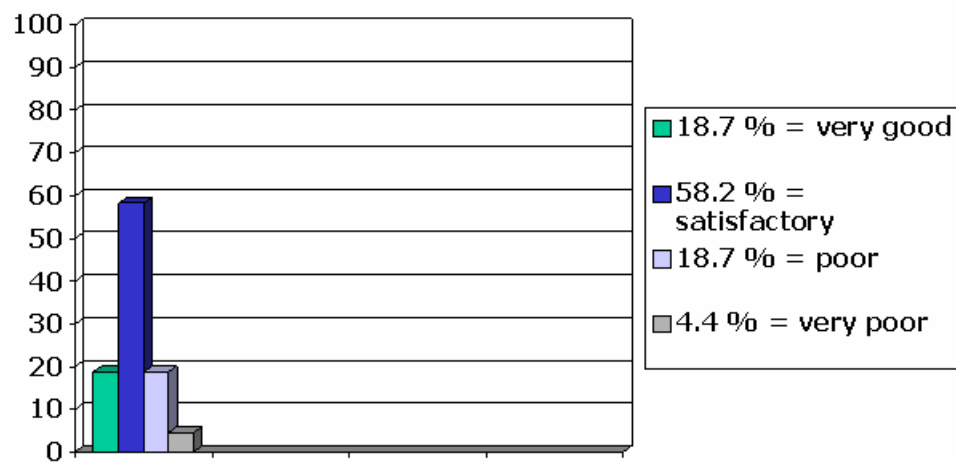
The final part of this discussion is concerned with the way the respondents rated their English language level after they graduated from college. These perceptions are presented in chart 5.17.

The data reveal that 49.3% of the respondents rated their English knowledge as “satisfactory”. However, 47.5% rated their English knowledge as “very good.” To illustrate the improvement in their college studies and the usefulness of the courses that they studied at college level, table 5.1 presents their perceptions of the English language proficiency before and after college along with the usefulness of the courses at college level.

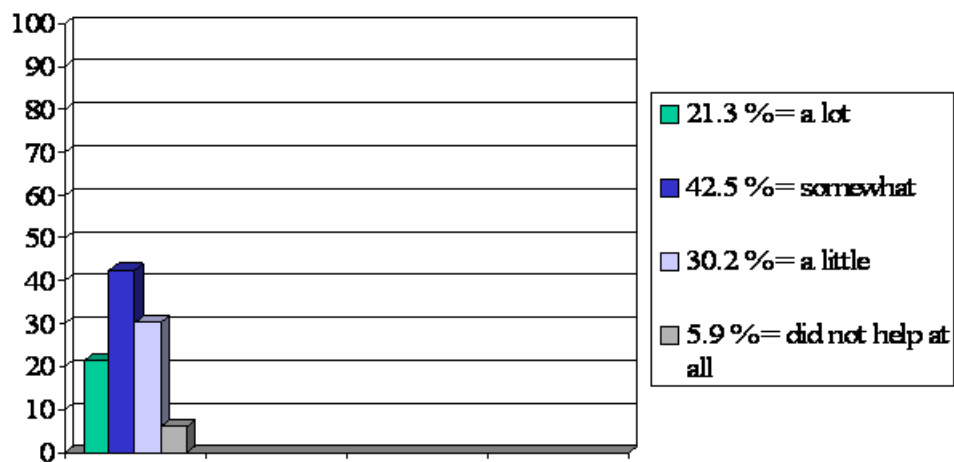
Comparing the perception before and after college, it appears that there are two significant improvements in language proficiency; the increase in rating from 18 to 47 % in the “very good” category and the decrease in rating from 18.7 to 2.7 % in the “poor” category. However, considering that they said English is very important in their professional lives and there are no significant improvements in the other categories, the overall improvements do not measure up to the required high standard in the workplace.

In conclusion, the participants who reported that they began college with a satisfactory level of English proficiency graduated with little improvement. The English language courses that they took at the college level were not helpful enough in relating English language use to their medical needs. The English language courses at the college level did not adequately define the eventual use of the English language for medical program students.

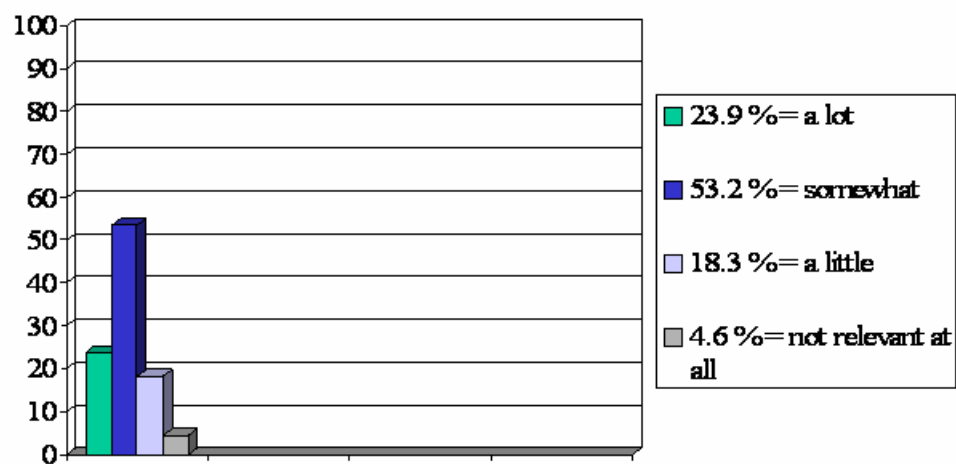
The perceived English language proficiency before college
chart 5.14



Ranking the English language courses during college in terms of helping the respondents in conducting medically related tasks
5.15



The relevancy between the English language courses at college and the current medical needs
5.16



The perceived English language proficiency after college
chart 5.17

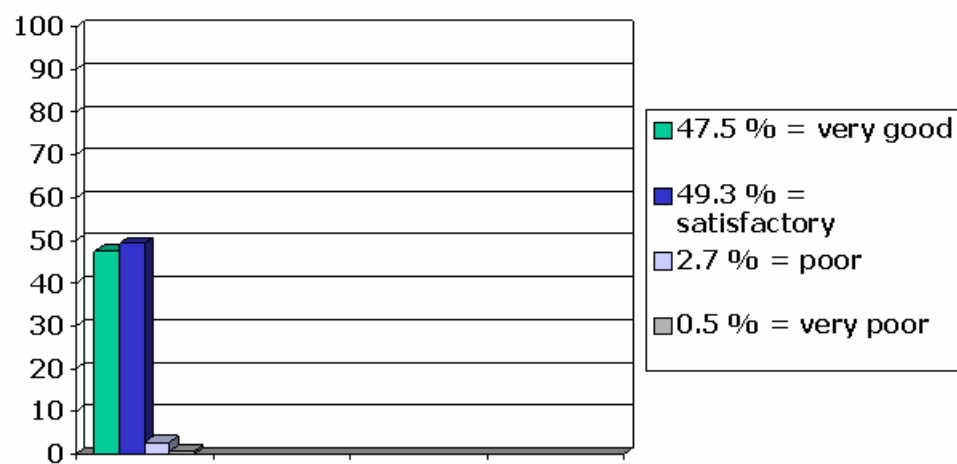


Table 5.1
The Perceptions of the English Language Proficiency Before and After College Along with the
Usefulness of Courses at College Level

	Very good or A lot	Satisfactory or Somewhat	Poor or A little	Very poor or Not relevant at all
The perceived English language proficiency before college	18.7 %	58.2 %	18.7 %	4.4 %
The perceived English language proficiency after college	47.5 %	49.3 %	2.7 %	0.5 %
The usefulness of college language courses	21.3 %	42.5 %	30.2 %	5.9 %

Recommendations and Directions for Further Research

The following suggestions and recommendations can be incorporated in any English as a foreign language course for medical purposes.

- 1- This study suggests that the English language is used extensively in the medical field in EFL and lingua franca contexts. It plays a crucial role as the main tool of communication to conduct a variety of different activities. Therefore, the criteria to define English language courses for medical purposes should be based on the target communicative situations representing the communicative use of language rather than formal linguistic categories representing the grammatical rules of language.
- 2- The relative emphasis of the four English language skills in the introductory courses for medical purposes should be based on activities driven by the actual communicative situations demanded by the medical profession.
- 3- Though this study suggests that receptive skills are perceived as more important than productive skills in a wide range of activities in the medical field, it is hard to recommend that English courses for medical purposes should emphasize reading and listening skills over writing and speaking skills because the differences in percentages between receptive and productive skills are very close. Further research in this regard is needed to support such claim.
- 4- The findings of the first research question suggest that physicians and dentists use English more than pharmacists and applied medical specialists. Therefore, it is not enough to design only one generic curriculum for English for medical purposes. English

language courses for students in medical professions should be designed specifically for each prospective field of the medical profession.

- 5- Complementary courses in English for medical purposes should be available on an on-going basis in hospitals and health clinics for health professionals who feel that their college preparation was not adequate.

Finally, this study has provided empirical data on a certain group of learners who belong to the medical profession and graduated from medical colleges. Though the aim is to have a clear picture of their English language medical needs to enhance the English language courses at the college level, the picture does not yet cover the entire wide spectrum of the ESP process. The following recommendations may facilitate further recommended areas of research in order to obtain a more comprehensive view of the wide spectrum of the ESP field.

- 1- This study identified the English language communicative needs as perceived by a certain group of learners at the workplace. However, it is important to investigate the same needs as perceived by current students and their instructors to see how these perceptions reconcile with the findings of this study.
- 2- If this study is used as an input in selecting text materials and teaching methods for medical students, an evaluation study ought to be carried out to test how the new courses meet the intended communicative needs.
- 3- A related research project in this regard is to investigate the required English language skills of ESP teachers to determine the needed level of qualifications to teach ESP courses in terms of how much specialized knowledge teachers need and how they get it.

- 4- Further research is needed in regard to the importance of receptive skills versus productive skills in the medical field.
- 5- This study provided information regarding the specific language situation in the medical field of Saudi Arabia. Since this environment presents a lingua franca, it would be interesting to investigate how interaction unfolds at the micro level. The following are few examples:
 - a. Looking at how non Saudi health professionals communicate with Saudi patients.
 - b. Investigating the role of translators as mediators in Saudi hospitals since non-Saudi doctors depend on translators to communicate with Saudi patients.
 - c. Studying how the language situation in Saudi hospitals affects code switching among Saudi health professionals.
 - d. Examining how communicative strategies are used when Saudis and non-Saudis communicate in Saudi hospitals.
 - e. Researching potential communicative differences in day-to-day activities between physicians, dentists, pharmacists, and applied medical specialists.

REFERENCES

- Al-Busaidi, S. S. (2003). *Academic needs of EFL learners in the intensive English language program at Sultan Qaboos University in the Sultanate of Oman*. University of Illinois at Urbana-Champaign, United States -- Illinois.
- Al-Gorashi, A. K. (1988). *The English communication needs of military cadets in Saudi Arabia as perceived by junior officers in the Saudi Army and air difference*. Unpublished Ph.D. dissertation, Indiana University.
- AL-Kamookh, A. A. (1981). *A survey of the English language teachers' perceptions of the English language teaching methods in the intermediate and secondary schools of the eastern province in Saudi Arabia.*, University of Kansas.
- Albazzaz, A. A. (1994). *The students' low achievement in business English at the College of Business Studies in Kuwait: An analysis of the students' educational and occupational language requirements.*, University of Sussex (United Kingdom), England.
- Almulhim, A. M. (2001). *An English language needs assessment of Saudi college-of-technology students with respect to a number of business sectors in Saudi Arabia.*, The University of Mississippi, United States -- Mississippi.
- Baker, C., & Jones, S. P. (1998). *Encyclopedia of bilingualism and bilingual education*. Clevedon ; Philadelphia, PA: Multilingual Matters.
- Basturkmen, H., & Al-Huneidi, A. (1996). *The language needs analysis project at the college of petroleum and engineering, Kuwait University* (No. ED413762).
- 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.
- Brecht, D. R., & Walton, A. R. (1995). The future shape of language learning in the new world of global communication: Consequences for higher education and beyond. In R. Donato & R. M. Terry (Eds.), *Foreign language learning. The journey of a lifetime* (pp. 110-152). Lincolnwood, IL: National Textbook Company.
- Brown, J. D. (1995). *The elements of language curriculum : A systematic approach to program development*. Boston: Heinle & Heinle.
- Brown, J. D. (2001). *Using surveys in language programs*. Cambridge, U.K. ; New York: Cambridge University Press.

- Brutt-Griffler, J. (2002). *World English : A study of its development*. Clevedon, UK ; Buffalo N.Y.: Multilingual Matters.
- Chomsky, N. (1964). *Syntactic structures*. The Hague: Mouton.
- Crystal, D. (2003). *English as a global language* (2nd ed.). Cambridge, UK ; New York, N.Y.: Cambridge University Press.
- Dean, R. A. (1989). *English language needs and preparation for non-native English speaking Army personnel* (No. ED304943).
- Dèornyei, Z. (2003). *Questionnaires in second language research : Construction, administration, and processing*. Mahwah, N.J.: Lawrence Erlbaum Associates.
- Dovring, K. (1997). *English as lingua franca : Double talk in global persuasion*. Westport, Conn.: Praeger.
- Dudley-Evans, T., & St. John, M.-J. (1998). *Developments in ESP : A multi-disciplinary approach*. Cambridge, U.K.: New York.
- Eggy, S., Musial, J., & Smulowitz, J. (1999). The relationship between English language proficiency and success as a medical resident. *English for Specific Purposes*, 18(2), 201-208.
- Ek, J. A. v., Alexander, L. G., & Council of Europe. Council for Cultural Co-operation. (1975). *Systems development in adult language learning : The threshold level in a European unit/credit system for modern language learning by adults*. Strasbourg: Council for Cultural Co-operation of the Council of Europe.
- Ellis, R. (1997). *Second language acquisition*. Oxford ; New York: Oxford University Press.
- Firth, J. R. (1957). *Papers in linguistics, 1934-1951*. London, New York,: Oxford University Press.
- Glendinning, E. H., & Holmstrøm, B. A. S. (1987). *English in medicine : A course in communication skills*. Cambridge Cambridgeshire ; New York: Cambridge University Press.
- Graddol, D., Leith, D., & Swann, J. (1996). *English : History, diversity, and change*. Milton Keynes England, London ; New York: Open University; Routledge.
- Hall, J. K. (2001). *Methods for teaching foreign languages : Creating a community of learners in the classroom*. Upper Saddle River, N.J.: Merrill Prentice Hall.
- Halliday, M. A. K. (1973). *Explorations in the functions of language*. London,: Edward Arnold.

- Hutchinson, T., & Waters, A. (1992). *English for specific purposes : A learning centered approach*. Cambridge: Cambridge University Press.
- Hymes, D. H. (1972). On communicative competence. In J. B. Pride & J. Holmes (Eds.), *Sociolinguistics*. Harmondsworth, England: Penguin Books.
- Jafre-Bin-Zainol-Abidin, M. (1992). *The English language needs of students at the science university of malaysia (MALAYSIA)*. Keele University (United Kingdom), England.
- Johns, A. M. (1981). Necessary English: a faculty Survey. *TESOL Quarterly*, 15(1), 51-57.
- Johns, A. (1991). English for specific purposes: its history and contributions. In M. Celce-Murcia (Ed.), *Teaching English as a second or foreign language* (2nd ed., pp. 67 - 77). Boston, Massachusetts: Heinle & Heinle.
- Jordan, R. R. (1997). *English for academic purposes : A guide and resource book for teachers*. Cambridge England ; New York: Cambridge University Press.
- Kittidhaworn, P. (2001). *An assessment of the English-language needs of second-year Thai undergraduate engineering students in a Thai public university in Thailand in relation to the second-year EAP program in engineering.*, West Virginia University, United States -- West Virginia.
- Lombardo, L. (1988). *Language learners' needs, interests and motivation: A survey of EFL students in an italian economics faculty* (No. ED304006).
- Munby, J. (1978). *Communicative syllabus design : A sociolinguistic model for defining the content of purpose-specific language programmes*. Cambridge, Eng. ; New York: Cambridge University Press.
- Ngäugäi wa, T. o. (1986). *Decolonising the mind : The politics of language in African literature*. London Portsmouth, N.H.: J. Currey ; Heinemann.
- Norton, B. (2000). *Identity and language learning : Gender, ethnicity and educational change*. Harlow, England: New York.
- Nunan, D. (1988). *The learner-centred curriculum : A study in second language teaching*. Cambridge England ; New York: Cambridge University Press.
- Oppenheim, A. N. (1992). *Questionnaire design, interviewing, and attitude measurement* (New ed.). London ; New York New York: Pinter Publishers ; Distributed exclusively in the USA and Canada by St. Martin's Press.
- Ostler, S. E. (1980). A survey of academic needs for advanced ESL. *TESOL Quarterly*, 14(4), 489-502.

- Peirce, B. N. (1995). Social identity, investment, and language learning. *TESOL Quarterly*, 29(1), 9-31.
- Phillipson, R. (1992). *Linguistic imperialism*. Oxford: Oxford University Press.
- Rattanapinyowong, W., Vajanabukka, R., & Rungruang Sri, P. (1988). A study of the academic English needs of medical students. *pasaa*, 18(1), 32-39.
- Richards, J. C., Platt, J. T., & Weber, H. (1985). *Longman dictionary of applied linguistics*. Harlow, Essex, England: Longman.
- Richards, J. C. (2001). *Curriculum development in language teaching*. Cambridge, U.K. ; New York: Cambridge University Press.
- Richerich, R. (1973). A model for the definitions of adult language needs. In J. Trim, R. Ritcherich, J. Van Ek & D. Wilkins (Eds.), *Systems development in adult language learning* (pp. 31-62). Strasbourg: Council of Europe.
- Richterich, R., & Chancerel, J.-L. (1978). *Identifying the needs of adults learning a foreign language*. Strasbourg: Council of Europe.
- Richterich, R., & Council of Europe. (1983). *Case studies in identifying language needs* (1st ed.). Oxford ; New York: Published for and on behalf of the Council by Pergamon Press.
- Seferoglu, G. (2001). English skills needed for graduate study in the US: multiple perspectives. *iral*, 39(2), 161-170.
- Shi, L., Corcos, R., & Storey, A. (2001). *Using student performance data to develop an English course for clinical training*.
- Shoemaker, C. (1983). *English needs of community college students: A faculty survey*. Paper presented at the Annual Meeting of the Midwest Regional Conference on English in the two year college, Overland Park, Kansas.
- Smith, L. E., & East-West Center. (1987). *Discourse across culture : Strategies in world Englishes*. New York: Prentice-Hall.
- Smith, L. E., Forman, M. L., & International Association for World Englishes. International Conference. (1997). *World Englishes 2000*. Honolulu: College of Languages Linguistics and Literature University of Hawai'i and the East-West Center.
- Soriano, F. I., & University of Michigan. School of Social Work. (1995). *Conducting needs assessments : A multidisciplinary approach*. Thousand Oaks: Sage Publications.
- Spitzer, D. R. (1979). *Critical issues in needs assessment* (No. ED172803).

- Tarone, E., & Yule, G. (1989). *Focus on the language learner: Approaches to identifying and meeting the needs of second language learners*. Oxford: Oxford University Press.
- The General Organization for Technical Education and Vocational Training. (1998, February). *The report of curriculum development department*. Riyadh, Saudi Arabia. The Saudi Arabian Cultural Mission in the U.S.A. (1991). *Education in Saudi Arabia* (1st ed). Washington, D.C.
- Warschauer, M. (1999). *Electronic literacies : Language, culture, and power in online education*. Mahwah, N.J.: L. Erlbaum Associates.
- Weddel, K. S., & Van, D. C. (1997). *Needs assessment for adult ESL learners*. *ERIC Digest* (No. ED407882).
- West, R. (1994). Needs analysis in language teaching. *Language teaching*, 27(1), 1-19.
- West, R. (1997). Needs analysis: state of the art. In R. Howard & G. Brown (Eds.), *Teacher education for language for specific purposes* (pp. 68-79). Clevedon: Multilingual Matters LTD.
- Widdowson, H. G. (1981). English for specific purposes: Criteria for course design. In L. Selinker, E. Tarone & V. Hanzeli (Eds.), *English for academic and technical purposes: Studies in honor of Louis Trimble* (pp. 1-11). Cambridge, MA: Newbury House.
- Witkin, B. R., & Altschuld, J. W. (1995). *Planning and conducting needs assessments : A practical guide*. Thousand Oaks: Sage Publications.
- Zughoul, M. R., & Hussein, R. F. (1985). English for higher education in the Arab world: a case study of needs analysis at Yarmouk university. *ESP journal*, 4(2), 133-152.

APPENDICES

APPENDIX A:
Questionnaire (English Version)

Linguistics Program
University of Georgia
Needs Identification Questionnaire
Designed by: Majid Alharby
Supervised by Dr. Linda Harklau
Linguistics Program, 125 Aderhold Hall Athens, 30602
Phone: (706) 542-4521

Questionnaire Consent Form

The attached questionnaire was developed as part of my doctoral dissertation. It intends to identify the English language needs of medical professionals in the Riyadh area. Your contribution will help in enhancing language programs designed to teach English for medical purposes to students in the medical field. This will help in bridging the gap between the needs of medical professionals at their workplace and the language courses offered to the medical students enrolled at English Language programs at the university level. You have been selected as the best source of information to contribute to this study by responding to the attached questionnaire.

The questionnaire is divided into four parts and consists of four pages. It is designed to be answered within twenty minutes. Please answer all questions as accurately as you can. Instructions are provided for each question.

Please note that you do not have to write your name. The information that you provide will be used for research and publication purposes only. Please note that by completing this questionnaire you agree that the researcher is allowed and permitted to use the information that you provide for research and publication purposes only. Your participation in this research study is completely voluntary and you may skip any questions that you feel uncomfortable answering.

The researcher will answer any further questions about the research, now or during the course of the project, and can be reached by telephone at: 05-445-6491 or email at: majed@uga.edu.

I am grateful for your time and effort in completing the questionnaire.

Thank you

Majid Alharby

Additional questions or problems regarding your rights as a research participant should be addressed to Chris A. Joseph, Ph.D., Human Subjects Office, University of Georgia, 612 Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address IRB@uga.edu
--

Survey of English language needs of medical professionals

PART ONE

1. Hospital where you work:
.....
2. Job title:
.....
3. Specialty:
.....
4. Name of University you graduated from:
.....
5. Name of college and major:
.....
6. year you graduated from college:
.....

PART TWO

7. What percentage of your work is conducted in English? Please write down a percentage in the space below.

.....
8. Have you been engaged in medical training courses while working at the hospital? Please circle one answer.

Yes
No
9. If you answered yes, which language is used in these courses? Please circle one answer.

Arabic
English
Both
Others

10. Do your coworkers include people who communicate in English only? Please circle one answer.

Yes No

11. If you answered yes, how often does your job require you to communicate with them? Please circle one answer.

A lot Somewhat A little Never

12. How important is it to have a high level of English proficiency to perform your job effectively? Please circle one answer.

Very important Somewhat important Little importance Not important

PART THREE

13. Which level of the *listening* English language skill enables you to perform your job effectively? Please circle one answer.

Excellent level Good level Satisfactory level N/A

14. Which level of the *speaking* English language skill enables you to perform your job effectively? Please circle one answer.

Excellent level Good level Satisfactory level N/A

15. Which level of the *reading* English language skill enables you to perform your job effectively? Please circle one answer.

Excellent level Good level Satisfactory level N/A

16. Which level of the *writing* English language skill enables you to perform your job effectively? Please circle one answer.

Excellent level Good level Satisfactory level N/A

17. Rank the following English language skills in terms of importance in conducting your job? Please rank using numbers from 1 to 4, with 1 being most important and 4 being least important.

Listening Speaking..... Reading..... Writing.....

18. How important is it to have a high level of English proficiency when performing the following activities? Please circle one number with 1 being most important and 5 being least important.

		Listening	Speaking	Reading	Writing
A	Dealing with patients	1 2 3 4 5	1 2 3 4 5		
B	Dealing with colleagues	1 2 3 4 5	1 2 3 4 5		
C	Phone conversations	1 2 3 4 5	1 2 3 4 5		
D	Letters			1 2 3 4 5	1 2 3 4 5
E	Memos			1 2 3 4 5	1 2 3 4 5
F	E-mails and Faxes			1 2 3 4 5	1 2 3 4 5
G	Research			1 2 3 4 5	1 2 3 4 5
H	Forms/Applications			1 2 3 4 5	1 2 3 4 5
I	Reports			1 2 3 4 5	1 2 3 4 5
J	Using Computers			1 2 3 4 5	1 2 3 4 5
K	Meetings	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
L	Instructions/ explanations	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
M	Presentations	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
N	Others, please specify:	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

PART FOUR

19. How would you rate your knowledge of English before you began college? Please circle one answer.

Very good

Satisfactory

Poor

Very poor

20. How did the intensive English language courses that you studied at the college level help you in the following tasks? Please look at the scale below and circle the appropriate number accordingly.

1 = a lot	2 = somewhat	3 = a little	4 = did not help all
-----------	--------------	--------------	----------------------

Speak about medical related topics in English	1	2	3	4
Write about medical related topics in English	1	2	3	4
Read medical related books, articles, and magazines	1	2	3	4
Understand medical related instructions, lectures, and homework	1	2	3	4
Translate medical related materials	1	2	3	4
Pass English language examinations	1	2	3	4

21. How were the English language courses during your college study relevant to your medical needs? Please circle one answer.

A lot

somewhat

A little

Not relevant at all

22. How would you rate your knowledge of English after you graduated from college? Please circle one answer.

Very good

Satisfactory

Poor

Very poor

Thank you for your participation

APPENDIX B:
Questionnaire (Arabic Version)

بسم الله الرحمن الرحيم

جامعة جورجيا

قسم اللغويات

الباحث: ماجد الحربي

اشراف: د. لندا هاركلو

Linguistics Program, 125 Aderhold Hall Athens, 30602, USA

Phone: (706) 542-4521

استبيان لتحديد احتياجات القطاع الصحي للغة الإنجليزية

الأخ المحترم / الأخت المحترمة .. السلام عليكم ورحمة الله وبركاته

إن الهدف من الاستبيان المرفق هو تحديد احتياجات القطاع الصحي للغة الإنجليزية. إن مشاركتكم في تعبئة هذا الاستبيان سوف يساعد في تكوين فكرة واضحة عن احتياجات القطاع الصحي للغة الإنجليزية مما ينعكس في تصميم برامج دراسية للغة الإنجليزية موجهة لطلبة القطاع الصحي.

لقد تم اختياركم كأفضل مصدر لتزويد الباحث بالمعلومات اللازمة لهذه الدراسة كجزء من رسالة دكتوراة لدراسة احتياجات القطاع الصحي للغة الإنجليزية. علما بأن المشاركة في هذا الاستبيان أمر اختياري.

أن هذا الاستبيان مقسم الى اربعة اجزاء. و كل جزء يحتوى على تعليمات للإجابة. و تعبئته لا تحتاج إلى أكثر من عشرين دقيقة.

نأمل التكرم بتعبئة هذا الاستبيان علما بأن تعبئة هذا الاستبيان تعني بأن الباحث له الحق في استخدام جميع ما تقدمونه من معلومات

لاغراض البحث والنشر العلمي فقط. و إذا كان لديك أي استفسار فيمكنك الأتصال على الباحث بواسطة الهاتف 05-445-6491 أو

البريد الإلكتروني majed@uga.edu.

كما اود التنويه بأنه ليس من الضروري كتابة الاسم في هذا الاستبيان.

ولكم جزيل الشكر

الباحث

ماجد بن عبد الكريم الحربي

إذا كان لديك اسئلة تتعلق بحقوقك كمشارك في تعبئة استبيان علمي , فالرجاء توجيه هذه الاسئلة الى:

Chris A. Joseph, Ph.D., Human Subjects Office, University of Georgia, 612 Boyd Graduate
Studies Research Center, Athens, Georgia 30602-7411, USA; Telephone (706) 542-3199;

E-Mail Address IRB@uga.edu.

استبانة العاملين في القطاع الصحي

الجزء الاول:

- 1- اسم المستشفى
.....
- 2- الوظيفة
.....
- 3- التخصص الوظيفي
.....
- 4- اسم الجامعة التي تخرجت منها
.....
- 5- اسم الكلية و التخصص
.....
- 6- تاريخ التخرج من الجامعة
.....

الجزء الثاني:

7- ما نسبة استخدامك للغة الإنجليزية في مجال العمل ؟ الرجاء كتابة نسبة مئوية تقديرية في الفراغ التالي:

.....

8- هل تلقيت دورات في اللغة الإنجليزية أثناء عملك بالمستشفى ؟ ضع دائرة على إحدى الإجابات التالية.

لا نعم

9- إذا أجبت بنعم , ما هي اللغة التي استخدمت في هذه الدورات من حيث الشرح و توجيه الاسئلة ؟

العربية الإنجليزية العربية والإنجليزية لغات اخرى

10- هل يوجد من ضمن زملائك في العمل من يتعامل مع الآخرين باللغة الإنجليزية فقط ؟ ضع دائرة على إحدى الإجابات التالية.

لا نعم

11- إذا اجبت بنعم , ما مدى احتياجك الوظيفي للتعامل مع هؤلاء الزملاء ؟ ضع دائرة على إحدى الإجابات التالية.

كثيرا بعض الشيء قليلا لا اتعامل معهم على الاطلاق

12- ما مدى أهمية أن تكون ملما بدرجة عالية في اللغة الإنجليزية لتأدية عملك بصورة فعالة ؟ ضع دائرة على إحدى الإجابات التالية.

مهم جدا مهم بعض الشيء مهم قليلا غير مهم

الجزء الثالث:

13- ما هو المستوى المطلوب في مهارة الاستماع والاستيعاب باللغة الإنجليزية لتأدية عملك بصورة فعالة ؟ ضع دائرة على إحدى الإجابات التالية.

ممتاز جيد مرضي لا أحتاج لهذه المهارة

14- ما هو المستوى المطلوب في مهارة المحادثة باللغة الإنجليزية لتأدية عملك بصورة فعالة ؟ ضع دائرة على إحدى الإجابات التالية.

ممتاز جيد مرضي لا أحتاج لهذه المهارة

15- ما هو المستوى المطلوب في مهارة القراءة باللغة الإنجليزية لتأدية عملك بصورة فعالة ؟ ضع دائرة على إحدى الإجابات التالية.

ممتاز جيد مرضي لا أحتاج لهذه المهارة

16- ما هو المستوى المطلوب في مهارة الكتابة باللغة الإنجليزية لتأدية عملك بصورة فعالة ؟ ضع دائرة على إحدى الإجابات التالية.

ممتاز جيد مرضي لا أحتاج لهذه المهارة

17- قيم أهمية المهارات اللغوية التالية عندما تستخدم اللغة الإنجليزية لتأدية عملك. (الرجاء ترتيب المهارات بصورة تصاعديّة بكتابة رقم 1 بجانب المهارة الأكثر أهمية وصولا الى رقم 4 بجانب المهارة الأقل أهمية).

مهارة الاستماع..... مهارة التحدث..... مهارة القراءة..... مهارة الكتابة.....

18- قيم أهمية المهارات اللغوية للغة الإنجليزية عندما تؤدي النشاطات التالية: الرجاء وضع دائرة على الرقم الذي تختاره علما أن رقم 1 يمثل التقييم الأعلى في الأهمية ومن ثم تدرجيا الى رقم 5 الذي يمثل التقييم الأدنى في الأهمية.

مهارة الكتابة	مهارة القراءة	مهارة المحادثة	مهارة الاستماع		
		5 4 3 2 1	5 4 3 2 1	التعامل مع المرضى	أ
		5 4 3 2 1	5 4 3 2 1	التعامل مع زملاء العمل	ب
		5 4 3 2 1	5 4 3 2 1	المكالمات الهاتفية	ت
5 4 3 2 1	5 4 3 2 1			الرسائل الكتابية	ث
5 4 3 2 1	5 4 3 2 1			المذكرات الداخلية	ج
5 4 3 2 1	5 4 3 2 1			البريد الإلكتروني و الفاكس	ح
5 4 3 2 1	5 4 3 2 1			البحث العلمي	خ
5 4 3 2 1	5 4 3 2 1			الطلبات و الاستثمارات	د
5 4 3 2 1	5 4 3 2 1			التقارير الطبية	ذ
5 4 3 2 1	5 4 3 2 1			استخدام الحاسب الآلي	ر
5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	الاجتماعات	ز
5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	اعطاء و فهم التعليمات و الشرح	س
5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	الندوات الطبية	ش
5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	جوانب اخرى (انكرها)	ص

الجزء الرابع

19- كيف تقيم قدرتك و فهمك للغة الإنجليزية قبل المرحلة الجامعية؟ ؟ ضع دائرة على إحدى الإجابات التالية.

جيد جدا مرضي ضعيف ضعيف جدا

20- كيف ساعدتك مواد اللغة الإنجليزية التي درستها في المرحلة الجامعية في الامور التالية؟ انظر إلى المعايير الآتية ثم ضع دائرة على الرقم المناسب.

ساعدتني كثيرا = 1	ساعدتني بعض الشيء = 2	ساعدتني قليلا = 3	لم تساعدني على الاطلاق = 4
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التحدث باللغة الإنجليزية في موضوعات طبية	1	2	3	4
الكتابة باللغة الإنجليزية في موضوعات طبية	1	2	3	4
قراءة كتب و مقالات و مجلات طبية	1	2	3	4
فهم المحاضرات و الشرح و الواجبات	1	2	3	4
ترجمة موضوعات طبية	1	2	3	4
اجتياز اختبارات اللغة الإنجليزية	1	2	3	4

21- هل كانت موضوعات اللغة الإنجليزية التي درستها اثناء المرحلة الجامعية وثيقة الصلة مع مجالك الطبي و بالتالي تلبى احتياجاتك اللغوية الطبية ؟ ضع دائرة على إحدى الإجابات التالية.

كثيرا بعض الشيء قليلا لم تكن لها صلة على الاطلاق

22- كيف تقيم قدرتك و فهمك للغة الإنجليزية بعد تخرجك من الجامعة ؟ ضع دائرة على إحدى الإجابات التالية.

جيد جدا مرضي ضعيف ضعيف جدا

APPENDIX C:
Data Collection Sites

بسم الله الرحمن الرحيم

MINISTRY OF DEFENCE AND AVIATION
MEDICAL SERVICES DEPARTMENT

وزارة الدفاع والطيران
الخدمات الطبية للقوات المسلحة

برنامج مستشفى الرياض والخرج
RIYADH AL KHARJ HOSPITAL PROGRAMME

RIYADH ARMED FORCES HOSPITAL
P.O. Box 7897
Riyadh 11159
Kingdom of Saudi Arabia
Tel. 4777714
Telex 401645 RKHPA SJ



مستشفى القوات المسلحة / الرياض
ص. ب. ٧٨٩٧
الرياض ١١١٥٩
المملكة العربية السعودية
هاتف رقم ٤٧٧٧٧١٤
تلكس ٤٠١٦٤٥ آر. كي. آتش. باي. أي إس. جي

Date: 21 – 02 – 2004

To: The Human Subjects Office at the University of Georgia

From: The Programme Directorate

This is to inform you that the researcher “**Majid Al Harbi**” from the Linguistics Program at the University of Georgia is permitted to distribute his questionnaire in our institute in regard of his PHD dissertation research concerning the English Language needs of Medical Professionals.

Thanks & Regards

Dr. Khalaf Al Mutairi
Programme Directorate
Riyadh Al Kharj Hospital

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Kingdom of Saudi Arabia
National Guard
Health Affairs
King Abdulaziz Medical City



المملكة العربية السعودية
رئاسة الحرس الوطني
الشئون الصحية
مدينة الملك عبدالعزيز الطبية

22 February 2004

**To : The Human Subjects Office
University Of Georgia**

Dear Sir,

This is to inform you that researcher Mr. Majid Al – Harby, from the Linguistics Program at the University of Georgia is permitted to distribute his questionnaire in our institute in regard of his PhD dissertation research concerning the English language needs of medical professionals.

Yours sincerely.

Academic Affairs

بسم الله الرحمن الرحيم

KINGDOM OF SAUDI ARABIA
GENERAL PRESIDENCY OF YOUTH WELFARE
PRINCE FAISAL BIN FAHAD BIN ABDULAZIZ
SPORTS MEDICINE HOSPITAL



المملكة العربية السعودية
الرئاسة العامة لرعاية الشباب
مستشفى الأمير فيصل بن فهد بن عبد العزيز
للطب الرياضي

14 February 2004

To: The Human Subjects Office
University Of Georgia

Dear Sir,

This is to inform you that researcher Mr. Majid Al Harby from the Linguistics Program at the University Of Georgia is permitted to distribute his questionnaire in our institute in regard of his PhD dissertation research concerning the English Language needs of medical professionals.

Yours sincerely.

Manager
Human Resources Department

[Handwritten signature]
14. Feb. 2004