

Exploring the Attitudes of Undergraduate College Students in Egypt towards English

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ABSTRACT

This paper attempts to identify the attitudes of undergraduate university students in Egypt towards the emergence of English as a global language and as an international language in scientific domains. A total of 54 Engineering and Business students from AASTMT- an English-medium university- participated in the study during the academic year 2018-2019. In order to answer the research questions, through the utilization of the Mentalist Theory on language attitude, the study employed two main tools: questionnaires and semi-structured interviews. SPSS package was used to statistically analyze quantitative data while qualitative data obtained from students' responses in interviews was investigated using content analysis. Results show that most students hold positive attitudes towards English and view it as a unifying tool that facilitates communication across the world. The paper concludes with a call for the application of critical pedagogy (CP) in the practice of ESP and EAP in order to address questions of linguistic and cultural identity. The researcher hopes to encourage curriculum developers and educators to raise students' awareness towards the complex ideological and social issues they face in learning and using English.

Keywords: language attitude, English as a lingua franca (ELF), English as an International Language of Sciences (ElLS), identity, linguistic imperialism

1. INTRODUCTION

Connections between language attitude and language learning cannot be overlooked. Individuals' perceptions of any language can be considered sociolinguistic variables that determine the value of that language within the society. Gardner (1980) defines attitude as "the sum total of a man's instinctions and feelings, prejudice or bias, preconceived notions, fears, threats and convictions about any specified topic" (p.267). Attitude to language - which may be positive or negative as well as instrumental or integrative - is a construct that explains linguistic behavior. The restoration, preservation, decay or death in the life of a language all depend on the individual's attitude towards language (Baker, 1992). Attitude is essential in aspects of survival, language skill improvement, and in the successful implementation of language policy. A Positive attitude will definitely pave the way for successful second language learning (Gardner, 1985). Conversely, negative attitudes may lead to class anxiety, low cognitive achievement, and low motivation (Victori and Lockhart, 1995).

Nowadays English plays a primary role in scientific communication and acts as a gate-keeper for prestigious jobs and professions. It has manifested itself in an unprecedented way as a representative of globalization and as a mark of social prestige. In today's "Information Age", knowledge of sciences in one's native tongue is not the only prerequisite for international cross-cultural advancement. English has become the common language for academic research, the Internet, reputable scientific journals, and many other vital areas. Students who wish to finish their degrees in a given technological, scientific, or medical field and later pursue a successful career

have no choice but to be proficient English language users. However, this prevalence has led English to act as a "Trojan horse" (Cooke, 1988) or a "Tyrannosaurus Rex" (Swales, 1997) that devours and maliciously brings about the downfall of other languages. It poses a threat to indigenous languages and functions as a means of inclusion or exclusion from further education, employment, or social positions (Pennycook, 1994).

In Egypt, as in many other outer circle countries, English has been an integral part of education policy in schools and universities. In fact, the English language is deeply rooted in Egypt through the country's British colonial history that began in the 1880s. English continued to gain ground in education and professional domains since then (Schaub, 2000). The number of foreign language and private schools and universities is soaring nowadays due to market requirements and the increasing need of professionals who can use English competently.

Proficiency in English oral and written communication of engineering and business students in particular are of paramount importance since English is part and parcel of their academic and professional lives. In Egypt, little contribution has been made to explore the attitudes of science and technology university students in general and Arab Academy for Science and Technology (AAST) students in particular as far as sociocultural elements of using English and its prepotency both in scientific domains and as a lingua franca are concerned. Additionally, ESP is usually taught in Egyptian universities as a sort of socially neutral language as it presumably deals with the language of some specific science or profession. The relevant work of the acclaimed social theorists, however, reveals that there is no socially or ideologically neutral language and that this fact applies to ESP.

Objectives of the Study

The purpose of this research is to investigate attitudinal dispositions of undergraduate Engineering and Business students at an English medium university in Egypt towards the English language both as a lingua franca and as an International Language of Sciences (EILS). The study adopts the mentalist theory of attitude with its three constructs: affective, cognitive and behavioral (McKenzie, 2010). It also explores their perceptions

towards sociolinguistic and sociocultural considerations involved in learning and using English.

Research Questions

- 1. What are students' attitudes towards learning and using English as a lingua franca?
- 2. What are students' dispositions towards the dominance of English as an international language of sciences?
- 3. To what extent are university students aware of the social and political dimensions inherent in the dominance of English as an international language?

Significance of the Study

Language attitude and perception have been among the focal points of sociolinguistic studies out carried by as far as learner behavior is concerned. How successful people are in learning a language is exactly and directly influenced by what they think and how they evaluate the target language, the target language speakers and culture. There is a generalized agreement that attitude towards a given language has an influence on the level of proficiency achieved by learners (Gardner 1980&1985). A better understanding of students' attitudes may assist ESL, ESP and EAP instructors in devising language teaching programs that generate more motivated and successful learners. Additionally, it can help material designers create and teachers select activities and tasks that are relevant to those attitudes. This study attempts to understand learners' attitudes towards English so that curriculum developers could conduct needs analysis and devise language programs based on such perspectives.

2. REVIEW OF LITERATURE

Attitude and language learning

According to the "mentalist" theory of attitude (McKenzie, 2010), the termincludes three components: affective, cognitive and behavioral. The "affective" refers to the feeling and emotions that one has towards an object. Affective responses are expressions of emotions raging from appreciation, disgust to anger. The "cognitive" component is made up of the held beliefs and ideas or opinions about the object of the attitude.



It includes the perceived value, importance and need of a language. Finally, the behavioral component refers to one's consisting actions or behavioral intentions towards the object (Wenden, 1991). In other words, it is the manner an individual behaves in a particular way regarding a certain object. Regarding Wenden's theory of attitudes, Van Els et al. (1984) (cited in Al-Tamimi & Shuib, 2009) claimed that "it does not really matter whether all or only one of the three components are measured; the relationship between the components is so close that sufficient information on an attitude can be obtained by measuring only one component, no matter which" (p.33). According to C. Gardner (1985, p.39-49), there are about five characteristics of attitude to be considered in learning second language:

- 1. Attitudes are cognitive (i.e. are capable of being thought about) and affective (i.e. have feelings and emotions attached to them)
- Attitudes are dimensional and muli-faceted rather 2. than bipolar - they vary in degree of favorability or un-favorability.
- 3. Attitudes predispose a person to act in a certain way, but the relationship between attitudes and actions is not a strong one.
- 4. Attitudes are learnt, not inherited or genetically endowed.
- 5. Attitudes tend to persist but they can be modified by experience.

An attitude characteristically provokes behavior that is favorable or unfavorable, affirmative or negative towards the object or a group of objects with which it is related (Allport, 1967). Ellis (1994) stated that attitudes can be measured indirectly through rating scales such as the Semantic Differential Techniques or directly using self-report questionnaires. They may be measured at the individual level or explored within a group or a community of people. At either level, information gathered from individuals, groups, or communities offers a way of democratically representing the views of the people towards the language they learn (Baker, 1992). Attitude has been a subject of research interest among sociolinguists and social scientists over the

years. Most scholars have claimed that how successful people are in learning a language is exactly and directly influenced by what they think and how they evaluate the target language, the target language speakers, culture, and of course, the learning setting. Many studies have examined the relationship between attitude and second language proficiency (Cle'ment & Kruidenier, 1985; Bachman, 1990; MacIntyre & Charos, 1996). Achievement in a target language relies not only on intellectual capacity, but also on the learner's attitude towards language learning. Surveys of attitudes have provided social indicators of changing beliefs about language and the chances of success in language policy and implementation.

Global use of English

Since World War II, the status of English as a language of global communication, economic exchange, and scientific research has rapidly increased (Warschauer, 2000). Proficiency in English has become an essential skill for citizens employed in foreign trade, tourism, scientific and technological contexts (ibid). Today, the total number of English speakers ranges between 700 million to one billion (Pennycook, 2001). Consequently, this situation has led to the expansion of the process of Teaching English as a Foreign Language (TEFL) since non-native speakers of English (NNSs) exceed native speakers (NSs). According to Kachru (1986), English exists in three main circles: (1) the inner circle in which English is the native language; (2) the outer circle where English is used as a second language in governmental institutions.

Countries of the outer circle are mainly former colonies where English is an official language; (3) the expanding circle where English is used and taught as a foreign language and is increasingly part of many people's daily lives. Many of the speakers in the outer and expanding circles may be proficient users of English but might not master the standard form of the language. For them, English is a means of communication that does not require the native speaker expertise. This group is referred to as using English as a lingua franca (ELF).

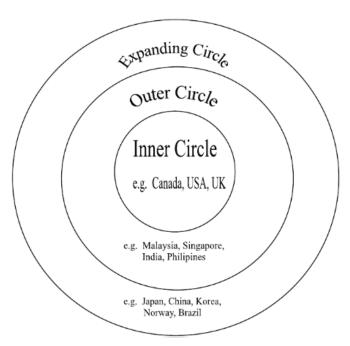


Figure (1): Kachru's Three Concentric Circles of English

Scholars had differing views regarding the reasons behind the spread of ELF across the world. On the one hand, many of them strictly believed that English has obtained its global status naturally and neutrally due to the high technological, economic, and political changes that recently took place in the international spheres and which necessitated a unified code by which all people can communicate (Crystal, 1997). Other views, on the other hand, argued that the dominance of the English language has been made "deliberately" and not accidentally.

Some scholars even believed that it all fell under a political strategy adopted by the British and U.S. governments since the mid-1950s to protect and promote capitalist interests (Pennycook, 2001). Whereas the age of physical colonization and domination has come to an end, capitalism - with English as its sole agent - has given rise to a new kind of colonization in which cultures with fewer resources are undermined (Holly, 1990). With the expansion of the U.S. power and its influence through business, films, songs, T.V. programs, advertisements, and the Internet, the growth of English has been nurtured and accelerated (Cook, 2003). In this sense, language has been used as a symbol for status and power, and therefore influenced and shaped people's response, values, and cultures. Such views seem to take into account the social and political aspects of learning and

teaching English. Language use reflects culture and it is impossible to disassociate the two in any real sense (Fairclough, 1992). Since most languages have this dual character of providing the means of communication as well as expressing a sense of community and culture, it follows that English language teaching (ELT) may be accompanied by undesirable effects of rejection of one's culture and identity. It is not simply, as it has been often dressed up to be, an "innocent" tool at the service of the non-English speaking nation and for its betterment and integration into the world's information systems (Phillipson, 1992). The same threats of English as an international language (ElL) apply in fields of business and academic research.

The dominance of English in scientific communication

The current dominance of English as an international language of sciences and academic publication has been highly evident in recent years (Swales, 2004). Academia has been one arena where speakers of different languages regularly communicate with one another; whether they are lecturers, researchers, students, or university personnel. English as an academic lingua franca has served as a vehicular language by which speakers from different first language backgrounds communicate a message, carry out a task, or solve a problem. In addition, ELF has been particularly visible within the genre of research publication.

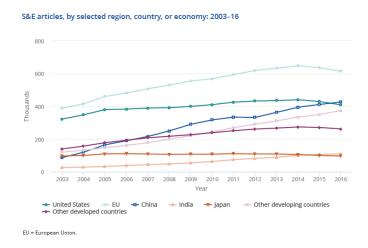


Figure (2)
Source: National Science Foundation (NSF)



Statistics above (fig. 1) show that linguistic factors have been a great obstacle to publication for some non-Anglophone scholars than they are for their Anglophone peers. In fact, the use of English as the universal scientific language has created tremendous challenges for those who are not native speakers. The preponderance of English as the language of scholarly journals, articles, and books has led some scientists to question the value of writing in any language other than English. Higher investment in language learning and additional costs of producing linguistically adequate texts have been issues with which the non-native researcher has to struggle.

There has been an expansion of the discipline of EAP (English for Academic Purposes) within universities and educational institutions worldwide. EAP courses have been set up to help those students whose English is not their first language so they can reach their full academic potential (Dudley-Evans & St.John, 1998). Studies have shown that non-native speakers have more difficulty in the productive skills of the language (writing and speaking) than the receptive skills (reading and oral understanding). Therefore, the native speaker is favored over the non-native or foreign-language speaker in communicative situations that require the use of English (Ammon, 2001). Furthermore, the dominance of English in science has affected the other languages internally. In most cases, modernization of terminology has occured mainly by way of loans from English that were borrowed rather than using indigenous linguistic resources. English, thus, has raised important concerns about the dangers of linguistic and cultural homogeneity (Cook, 2003).

Clearly, a balance has to be reached between the maintenance of national languages across all domains and the on-going need for English in a world of globalization, booming technological advancement, and academic research. In Egypt and the Arab World, this dilemma has not been a new one for the specific issue of the language instruction of science in the Arab region dated back to the 19th century (Suleiman, 2003). There has always been a struggle between the need for a foreign language to facilitate access to technological advances and the urge to use Arabic as a symbol of national and regional identities (Amin, 2009). The tension has existed between the "realism" of the current condition of English

as an international language of science and the "dream" of an Arabised scientific community (BouJaoude and Sayah, 2000). The solution to this complex situation, nonetheless, has not been clear-cut due to an "absence of an organized knowledge base to inform decisions regarding language in science education in the region" (Amin, 2009).

Regarding the attitudes of NNS students and researchers to EILS, many studies have been conducted in American and European contexts, but a few were executed in Egypt. In Tardy's (2004), for instance, all 45 respondents, who were international graduate students studying at an American university, believed there were beneficial aspects to the use of English as an international language of science though 36 of these individuals also identified significant disadvantages, specifically the time needed to learn English to a high level. The findings of Ammon (1990), on the other hand, proved that 55 percent of surveyed German scientists found no sense of disadvantage in their ability to communicate in English. As far as English in Egypt is concerned, Schaub (2000) and Warschauer, Said, and Zohry (2002), Lewko (2012), and Ali (2014) were perhaps the only significant surveys relevant in this respect. In Schaub (2000), the researcher reviewed the history of the English language in Egypt and examined the forms and functions for English use in contemporary Egypt. Warschauer, Said, and Zohry (2002) combined linguistic analysis, a survey, and interviews to examine English and Arabic language use in online communications by a group of young professionals in Egypt.

Lewko (2012) investigated linguistic projection, ownership of English, and issues of solidarity and power with the English language among students in an Englishmedium elite university. In Ali (2014), motivations and attitudes of undergraduate students towards the ESP course they study in El Mansoura University were investigated. The results indicated that students were highly motivated and had relatively positive attitudes towards their ESP courses. This study was conducted to understand learners' attitudes towards English in an English- medium University so that curriculum developers could conduct needs analysis and devise language programs based on such perspectives.

3. METHODOLOGY

Research Design

Language is not only a system of signs governed by rules but is closely linked to the social, subjective and objective world since it bears the attitudes, habits and cultural features of its speakers. Psychological and social aspects affect the ability of the learners to master a language. The success in language learning depends upon many factors such as learning style, motivation, and attitude towards the language (Walqui, 2000; Lightbown and Spada, 1993). This study was conducted to identify engineering and business students' attitudinal orientations towards the global use of the English language in general and its role in scientific communication in particular. It also attempted to analyze their opinions with regard to a set of sociocultural aspects involved in learning and using English.

The study employed both quantitative and qualitative methods. "In social science triangulation is defined as the mixing of data or methods so that diverse viewpoints or standpoints cast light upon a topic. The mixing of methodologies, e.g. mixing the use of survey data with interviews, is a more profound form of triangulation" (Oslen et al, 2004). Two research tools were implemented: questionnaires and interviews. Since all the questionnaire was in multiple choice format, the data collected with this instrument alone would lack depth and richness. Therefore, in order to clarify the questionnaire responses and to elaborate on its findings, face-to-face interviews were conducted. The researcher believes this design is appropriate since the research is primarily of an exploratory nature.

Participants

The subjects involved in this study were undergraduate engineering and business students from the Arab Academy for Science, Technology and Maritime Transport (AASTMT) at the Smart Village Branch in Egypt, a regional university operated by the Arab League. It is known for its programs in Marine Transportation, Business, and Engineering. AASTMT is an English-medium institution that requires four years of study (or an equivalent of eight terms) and five years

of study (or an equivalent of ten terms) that qualify the students to obtain a B.S. degree in Business or engineering respectively. Because they come from diverse backgrounds, students at the Arab academy have varying proficiency levels in English. Prior to their admission to the AAST, students are required to sit for the Cambridge English Placement Test (CEPT). The test is a comprehensive, international assessment of English ability that covers all the key language-learning skills. Results are mapped to the Common European Framework of Reference for Languages (CEFR) – the international standard for describing language ability.

A student who scores 40 or more (B1 or Independent User) displays the required proficiency level for ESP 1 course. Students who receive a score below 40 (A2 or Basic User) should complete ESP 0. Subjects involved in the study were undergraduate students enrolled in the spring semester of the academic year 2018-2019. They were selected randomly from the Colleges of Engineering and Business Administration. The total number of participants is 54 (42 males and 12 females). 80% of them passed the Cambridge Placement test with B1 level while the other 20% scored less than 40 (A2 level) and were thus bound to take the ESP 0 course.

Instruments

Questionnaires

The questionnaire (see Appendix A) began with a series of demographic data questions designed to identify participants' backgrounds. The following sections were attitudinal questions regarding the use of English as a lingua franca (ELF), English as an International Language of Sciences (ElLS), and finally identity issues inherent in the dominance of English worldwide. The three components of Mentalists theory of attitude (McKenzie, 2010); namely "affective", "cognitive" and "behavioral" were directly addressed in the attitudinal questionnaires with the aim of understanding students' general attitudes towards ELF and ElLS, raising their awareness on critical issues inherent in learning a global language as well as giving them the opportunity for self-reflection.

Affective components refer to how students feel



towards the English language. Examples from the questionnaire include items such as "I like speaking English", "I enjoy watching English movies more than Arabic ones" and "sometimes I feel shy if I don't speak English fluently in class". Cognitive components refer to what students think about the English language. "Knowledge of English offers advantages in seeking good jobs", "proficiency in the English language is important in academic aspects" and "English should be the medium of instruction at the Egyptian universities" are among the statements that assess the cognitive component. Finally, behavioral components refer to what students do about the English language. This was shown through students' responses to items such as "I will encourage my children to learn English at an early age", "I would like to study more English" and "if an academic text is available in English and Arabic, I will read the text in English".

The questionnaire is a 4-point Likert-type scale that range from "Strongly Agree" (1) to "Strongly Disagree" (4). It consists of 30 items divided into three sections. Some of the items from the first section "Attitudes towards English as a lingua franca" were partly adapted from Lewko (2012) and Mamun, Mostafizar Rahman, Rahman and Hossain (2012). The items in the second section "English as an International Language of Science" were inspired from Tardy (2004) and Zare-ee and Gholami (2013). The third section was devised by the researcher based on her observation of the current status of English and Arabic languages and addressing the three components of attitude.

Interviews

Interviews allow a researcher not only "to enter into the other person's perspective," but also to see "how people have organized the world and the meanings they attach to what goes on in the world..." (Patton, 1990, p.278). Therefore, in order to clarify the questionnaire responses and to elaborate on its findings, eight in-depth student interviews were conducted. The SSI (semi- structured interview) employs a blend of closed- and open-ended questions, often accompanied by follow-up why or how questions (Adams, 2015). Semi- structured interviews (see Appendix B) were used to obtain data in order to supplement and cross-validate the students' responses to the questionnaire. Some of the interview questions

came from a study on linguistic imperialism in Ferandez (2005). The guestions consisted of seven items that were meant to sound out the participants' attitudes and explain what the questionnaire could not make clear. Issues discussed were reasons behind learning English, feelings concerning the discriminatory aspect of EILS and opinions on protecting local languages. For the sake of confidentiality, actual names of participants were changed to pseudonyms.

Procedure

For this study, the researcher distributed the questionnaires to undergraduate Engineering and Business students at the AASTMT campus in Smart Village. Before administering the questionnaires, permission was granted from the School of Business at the Academy. Prior to distributing the questionnaire, the students were informed of the objectives and significance of the research and ensured that anonymity will be preserved. In addition, each item was explained and clarified in detail. After filling in the questionnaires, the investigator requested that participants take part in an interview. After interviewing eight of the participants, enough data was provided and responses tended to get repeated. Interviews were conducted individually in the lecture hall after all students departed in order to guarantee quietness and comfort for the subjects. Interviewees were first briefed on the interview aims and procedures. They were given the choice to respond either in English or Arabic. This was granted to allow students the utmost circumstances to freely express themselves. A voice recorder and a notebook were used to record the interviews. The researcher made sure of maintaining a neutral position while clarifying each item in the questionnaire and interview.

4. RESULTS AND DISCUSSION

The data collected in the present study was of two types i.e. quantitative and qualitative. The quantitative data of the questionnaires were analyzed and computed using the Statistical Package for Social Sciences (SPSS) for Windows version 20. Descriptive statistics was obtained through analyzing the percentages of agreement or disagreement of each item in addition to providing the Mean (average) and standard deviation (St. Dev.) scores of Likert scale questions. For analyzing the

qualitative part, the Arabic responses were translated into English and transcribed. After that, the responses were analyzed in terms of themes related to the study objectives (Thematic analysis).

4.1 Questionnaire Results

Demographic Data

Questions were set to identify the general characteristics of the population. The total number of participants for this study was 54. Except for one Iraqi and another Libyan student, over 96% of the participants were Egyptians whose mother tongue is Arabic. Their ages ranged from 17 to 24. Out of the 54 respondents, only 12 females have participated in the questionnaire. Subjects were asked if they went to private or public schools; 72.2% stated that they went to governmental schools and 27.7% stated that they went to language schools. The participants belonged to different departments of Engineering as well as the College of Business Administration. The distribution of the respondents as per discipline is given in Table 1 below:

Table 1: distribution of the respondents as per discipline

Discipline	Total respondents	percentage
Business	15	27.7
Administration		
Civil	1	1.8
Engineering		
Mechatronics	22	40.7
Construction	1	1.8
Architecture	15	27.7
Total	54	100

As the table shows, most participants were enrolled in the Faculty of Engineering while Business Administration students accounted for nearly the third.

English as a Lingua Franca

Respondents' attitudes were obtained through the use of a four- point Likert scale questionnaire with 1= strongly agree (SA), 2= agree (A), 3= disagree (D), and 4= strongly disagree (SDA). As previously mentioned, the three components of attitude: affective, cognitive, and behavioral were measured in the questionnaire.

Table 2: Descriptive Statistics for Attitudes towards ELF

Item	SA	A	D	SDA	Mean	St.Dev.
1-I like speaking English.	57.4%	38.9%	0%	3.7%	1.5	0.693
2-Sometimes I feel shy if I don't speak English fluently in class.	24.1%	40.7%	22.2%	13.0%	2.24	0.973
3-I enjoy watching English movies more than Arabic ones.	72.2%	16.7%	3.7%	7.4%	1.463	0.884
4-I will encourage my children to learn English at an early age.	81.5%	16.7%	0%	1.9%	1.22	0.537
5-Knowledge of English offers advantages in seeking good jobs.	75.9%	22.2%	0%	1.9%	1.27	0.563
6-Proficiency in the English language is important in academic aspects.	57.4%	38.9%	1.9%	1.9%	1.481	0.636
7- I would like to read more newspapers and magazines in English.	31.5%	33.3%	31.5%	3.7%	2.074	0.887



Item	SA	A	D	SDA	Mean	St.Dev.
8- keeping myself proficient in the English language can be costly.	16.7%	35.2%	38.9%	9.3%	2.407	0.879
9- I would like to study more English.	55.6%	33.3%	7.4%	3.7%	1.592	0.789
10- A student who speaks English with an almost native speaker accent would feel privileged among	40.7%	40.7%	14.8%	3.7%	1.814	0.825

Table 2 summarizes respondents' attitudes towards English as a lingua franca (ELF). The majority of participants stated that they like speaking English (57.4% strongly agreed and 38.9% agreed). However, 65% of the students admitted that they feel shy if they don't speak English fluently in class. Most of the subjects strongly agreed that they enjoy watching English movies more than Arabic ones, which indicates that they realize the integrative role of the English language. On the other hand, "knowledge of English offers advantages in seeking good jobs" and "proficiency in the English language is important in academic aspects" received a mean of 1.27 and 1.48 respectively. Both items refer to the instrumental value of English which students seem to highly appreciate.

As far as the behavioral attitude is concerned, 81.5% strongly agreed that they would encourage their children to learn English at an early age. Similarly, 88% of respondents would personally like to study more English. However, ambivalence was shown in response to "I would like to read more newspapers and magazines in English" which scored a mean of 2.07. A large percentage of participants (80%) agreed that a student who speaks English with an almost near-native speaker accent would feel privileged among his/her classmates. With regards to the financial aspect of learning English, opinions were divided into 51% of agreement and 49% of disagreement to the fact that keeping one's proficiency in English can be costly.

English as an International Language of Sciences

Table 3: Descriptive Statistics for Attitudes towards EILS

Item	SA	A	D	SDA	Mean	St.Dev.
1-English should be the medium of instruction at Egyptian schools and universities.	51.9%	35.2%	13%	0%	1.611	0.711
2- If an academic text is available in English and Arabic, I will read the text in English.	38.9%	33.3%	18.5%	9.3%	1.98	0.980
3-I like to study technical subjects in English rather than Arabic.	51.9%	29.6%	14.8%	3.7%	1.703	0.860
4-when submitting a research, a professor has the right to criticize my English language regardless of the academic content.	27.8%	38.9%	22.2%	11.1%	2.166	0.966
5- I will improve my English in order to succeed in higher education.	64.8%	24.1%	9.3%	1.9%	1.481	0.745

6- A native speaker (NS) student of Engineering or Business has more advantages than a non-native speaker (NNS).	44.4%	31.5%	20.4%	3.7%	1.833	0.884
7- All university books should be taught in their original version with no translation.	14.8%	27.8%	37%	20.4%	2.629	0.977
8- English allows everyone in the scientific field to communicate equally.	52.9%	39.2%	5.9%	2.0%	1.568	0.70
9- Teaching scientific subjects in English at public schools requires a huge budget.	21.6%	49%	21.6%	7.8%	2.156	0.857
10- I can understand academic texts in English more than Arabic.	32.7%	34.6%	23.1%	9.6%	2.096	0.975
11- Students receive science in a better and more exact way when taught in English.	34.6%	38.5%	17.3%	9.6%	2.019	0.959
12- English enables university students to have a better access to reliable articles and scientific papers.	57.7%	32.7%	7.7%	1.9%	1.538	0.726

attitudes towards Respondents' English International Language of Sciences (EILS) is displayed in Table 3. There was a general agreement that English should be the medium of instruction (EMI) at schools and universities (51.9% strongly agreed and 35.2% agreed). In spite of this, 70.6% grasped the fact that "teaching scientific subjects at public schools requires a huge budget." In addition, subjects would prefer and can understand and read academic texts in English more than in Arabic. Statements 2, 3, and 10 scored the means 1.98, 1.7 and 2.09 respectively. Hence it can be deduced that students are aware of the instrumental value of English in science and technology. In the same line, "I will improve my English in order to succeed in higher education" and "English enables university students to have better access to reliable articles and scientific papers" received 89% and 90.4% of agreement respectively.

In terms of the prejudices EILS causes, students seemed to show some contradiction in this respect. Although most of them agreed (76%) that "a native speaker (NS) student of Engineering or Business has more advantages than a non-native speaker (NNS)" and that "when submitting a research, a professor has the right to criticize my English language regardless of the academic content" (66.75), they strangely enough showed strong agreement (92%) when asked if English allows everyone in the scientific field to communicate equally. Last though not least, 57% of participants disagreed to "all university books should be taught in their original version with no translation". Therefore, it can apparently be said that that while students favor English medium instruction (EMI), they still need their native language in order to fully understand the academic content.

Sociolinguistic and Sociocultural Considerations

Table 4: Descriptive Statistics for Sociolinguistic and Sociocultural Considerations

Item	SA	A	D	SDA	Mean	St.Dev.
1- The U.S.A. is the main reason for the dominance of English in the world.	30%	34%	22%	14%	2.2	1.030
2- Naming scientific terms in English and not translating them into Arabic threatens my native tongue.	13.7%	49%	29.4%	7.8%	2.313	0.812
3- English is extensively used in Egypt due to the country's past colonial history.	11.8%	31.4%	43.1%	13.7%	2.588	0.875
4-Teaching sciences in Arabic at universities will help keep our national identity.	13.7%	25.5%	43.1%	17.6%	2.647	0.934
5- Using English extensively in social media and technology is affecting my mother tongue and identity in a negative way.	21.6%	23.5%	39.2%	15.7%	2.49	1.0074
6- Some Egyptians use English as a sign of higher social status.	49%	37.3%	9.8%	3.9%	1.686	0.812
7- English discriminates between the rich and the poor.	13.7%	25.5%	37.3%	23.5%	2.705	0.985
8- When someone speaks English, I think he/she is educated.	29.4%	45.1%	19.6%	5.9%	2.019	0.860

Table 4 presents attitudinal orientations towards social, political, and cultural aspects of learning English. As far as preserving the native language and national identity is concerned, students' responses to the items in this section were rather mixed and inconsistent. On the one hand, 62% of them agreed that naming scientific terms in English and not translating them into Arabic threatens their native tongue. On the other hand, more than half disagreed that using English extensively in social media and technology is affecting their mother tongue and identity in a negative way. Moreover, 61% of the participants disagreed that "teaching sciences in Arabic at universities will help keep our national identity."

Statements 1 and 3 elicited respondents' awareness of the political and historical reasons for the prevalence of English in the world. Results show that 64% agreed that "the U.S.A. is the main reason for the dominance of English in the world", while more than half disagreed to the fact that "English is extensively used in Egypt due to the country's past colonial history".

Feelings of superiority and high social prestige associated with the use of English were also addressed in the questionnaire. Paradoxically, while 86% of participants concede that "some Egyptians use English as a sign of higher social status", a majority of them (74%) agreed

with the statement "when someone speaks English, I think he/she is educated"! Finally and most significantly, students' responses to item 7 "English discriminates between the rich and the poor" scored 62% of disagreement. Such attitude stands in contrast to their awareness of the fact that "teaching sciences at public schools requires a huge budget" (refer to item 9 in 4.1.3) and "Knowledge of English offers advantages in seeking good jobs" (refer to item 5 in 4.1.2).

4.2 Interview Results

Interviews were semi-structured in nature. They were conducted to explore the views and beliefs of individual participants and to provide in-depth analysis of their experiences and opinions. Out of the participants, six were males and two were females. The primary country of residence for all participants was Egypt except for two students who grew up in Saudi Arabia and another one who grew up in Kuwait. Half of the participants attended private schools while the other half went to public or Arabic schools before reaching the university level. One of the students mentioned that he used to attend a private school since Kindergarten before his parents decided to move him to a public one not to be more "privileged" than his siblings.

This response was particularly important since it clearly showed the role English has played as a mark of social prestige and the way it has contributed to distinguish some categories of people over others. Another participant noted that his parents sent him to a public school because it would be more affordable in case the family encountered any financial crisis. As Balduf et al (2010) argued, efforts are made to secure English language proficiency in non-English speaking countries but such efforts do not take into account the number of costs needed to achieve such goal. In Egypt and most Middle East countries, enrolling children in private schools that guarantee English language proficiency is very costly and not affordable to most families.

All eight participants seemed to hold positive attitudes towards English and would like to learn it more except for Mazen who expressed his dislike due to his very low proficiency level and the great trouble he faces to improve his English language skills. In addition, most of

the subjects believed that code-switching between English and Arabic is a necessity in classrooms in order to alleviate some of the difficulties they experience in understanding the academic content.

Perceived Language Difficulties at AAST

Most participants believed that those students who graduated from public schools will definitely face problems regarding the English language when they join the AAST since all technical subjects are taught in English. They mentioned that some of their classmates toiled over three or four terms before they were finally capable of coping with the academic content and scientific terminology. However, Dina, who graduated from a governmental school stated that she "did not encounter any difficulty with language when joining the AAST" because she "felt privileged for studying in English" and "had the motivation to improve" her linguistic skills. Again, signs of prestige and superiority for learning English are clearly expressed by participants. Another student said that he "started to take language courses before joining the Academy and then used the dictionary and consulted the professors for translating scientific terms." Likewise, Omar used to ask most of his professors to translate and re-explain the lessons for him. He even failed in those subjects where professors were busy or refused to offer their help.

Yasser added that "students decide to join the Academy because it is more prestigious, will grant them better job opportunities, or simply because they did not get enough grades in high school to join the public university." Therefore, he asserted, "it is the student's job to update his language skills and adapt to the situation." Yasser's comments seem to be rather realistic of the current situation worldwide and emphasize the relationship between globalization and English. Recent studies have shown that English is often a major factor to unleash well-paid job opportunities and to gain positions in organizations aiming at higher productivity (Casale & Posel, 2011; Bleakley & Chin, 2004).

English as a Discriminatory Tool

Five of the students who participated in the interviews



believed that English can act as a means of discrimination among people based on their proficiency level while three of them disagreed. Mostafa, who seemed to be guite fluent in English, indicated that "whenever he speaks English in class with an American accent, his classmates think that he is trying to show off".

Similarly, he noticed that "students make fun of those who speak English with a poor accent, implying that they are lower in status or even ignorant and uneducated." Mohamed noted that English can discriminate "but to a certain extent", for example, "in contexts where speaking and writing are necessary, competent users are privileged over non-competent ones." However, he emphasized that "improving one's level of English has become a necessity just like a B.A or an ICDL." Oppositely, Heba and Hany indicated that it does not necessarily cause discrimination because some people might receive poor education but are talented in acquiring the language while others might be well off but do not give much importance to education. Finally, Yasser insisted that it is the student's own responsibility to improve their English language since they will "bump into it eventually because it is the most common language in the world".

Protecting Local Languages

Except for one student (Hany) who fully believed in Arabisation, most students held opposing views to teaching scientific subjects in Arabic. Dina differentiated between "protecting the ethnic language" and "coping with sciences internationally." She confirmed that "it is more efficient to study in English since dealing with foreigners at work has become inevitable." Therefore, "English is better for communication in professional contexts." Mohamed pointed out that "we receive all sciences from abroad in English, so naturally speaking; we should study them in English.

" Mostafa admitted that "the Arabic language is being invaded and should be protected but not through Arabisation." "Improving industrialization and creating job opportunities in Egyptian companies that would not require English as a prerequisite can be one of the solutions", he added. Other students mentioned that "Arabisation is not a practical solution since all academic

information and research on the Internet is in English; besides, the status of Arabic internationally is not that prominent." Hany, on the other hand, believed that "Arabisation is a right decision but not well-planned." "The youth are losing their cultural identity in the Arab World because their language is being displaced and they are not trying to save it. Arabs no longer exist in the scientific fields as pioneers. They are just receivers of science and not inventors", he maintained. Hany strongly believes that "people around the world would be forced to respect and learn the Arabic language if great inventions and knowledge were offered by Arab scientists who unfortunately travel abroad because they are not given the chance to prove themselves in their countries."

Limitations of the study

The research tackled language attitudes in Egypt. However, a number of limitations to the present study should be highlighted. First, the research was confined to undergraduate Engineering and Business university students in an English-medium institution and did not include other disciplines such as Medicine, Pharmacy or Dentistry. Findings, therefore, cannot be generalized to the whole population or even to students in governmental universities who might yield different results. Second, due to time constraints, the study was limited to 54 students only in the academic year 2018-2019 at AAST. Finally, generalizations should be made with caution as far as the issue of gender is concerned since only twelve females participated in the study.

5. CONCLUSION

The present study revealed that undergraduate university students' attitudes towards English as a lingua franca and as an international language of sciences have been highly positive. They tended to be interested in the culture of the English-speaking world and realize the importance of English language proficiency in their future academic and professional lives. With regard to the threats that the Arabic language is facing, however, students' opinions were rather mixed, ambivalent, and inconsistent. They displayed little or no awareness as to the causes and implications of replacing their ethnic language with English. Except for a very few number,

most students viewed the widespread use of English and replacing their ethnic language with another as a "natural event" and not a potential threat to their cultural identities. Although some of them struggle with the academic content that is taught in English, they do not regard English as a discriminatory tool. Rather, they strongly believe that it is their responsibility to upgrade their English language level. As far as EILS is concerned, students seemed to be apprehensive of the fact that English serves as a gate-keeper for academic and professional success. They view EILS as the "natural" and only vehicle by which scientists, engineers and business men from different parts of the world can communicate. It is not surprising then that their responses to Arabisation of sciences were extremely negative.

Nowadays unequal divisions of power and resources (both material and immaterial) between groups are defined on the basis of language. The global spread of the English language can be seen as linked to linguistic imperialism where English becomes dominant at the expense of indigenous languages that may lose prestige, a phenomenon that may lead to gradual language attrition. Language teachers, accordingly, should try to empower their students so that English does not exert a hegemonic influence over local cultures. The tools employed in the research are meant to develop an awareness and selfreflection of complexities involved in learning English. Teaching practices should not continually conform to dominant political and institutional orders. Both language learners and teachers should start questioning the common-sense assumptions of language. Clearly, more critical knowledge of sociolinguistic and political facts needs to be incorporated into the ESP and EAP curriculum. Issues of language shift and maintenance, linguistic Human Rights, and linguistic imperialism have to be directly addressed in the classroom in order to raise students' awareness and help save our cultural and national identities.

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APPENDICES

Appendix A: Demographic Data Sheet

Thank you for taking part in this survey. Before you begin with the questions, please answer some questions about yourself. All information will be only used in academic research and your identity will be kept confidential.

1- Nationality:		
2- First Language:		
3- Age:		
4- Gender: Male / Female		
5-Semester:		
6- College:	Department:	
7- Have you graduated from a private	e or public school?	Private / Public
8- Have you taken ESP 0 course?	Yes/No	

Appendix B: Attitudinal Questionnaire

I. Attitudes towards English as lingua Franca (ELF)

1	2	3	4
Strongly Agree	Agree	Disagree	Strongly Disagree

	Strongly Agree		Strongly Disagree			
1- I like speaking English.	•		3	•		
2- Sometimes I feel shy if I don't speak English fluently in class.	1	2	3	4		
3- I enjoy watching English movies more than Arabic ones.	1	2	3	4		
4- I will encourage my children to learn English at an early age.	1	2	3	4		

5- Knowledge of English offers advantages in seeking good jobs.	1	2	3	4
6- Proficiency in the English language is important in academic aspects.	1	2	3	4
7- I would like to read more newspapers and magazines in English.	1	2	3	4
8 - Keeping myself proficient in the English language can be costly.	1	2	3	4
9- I would like to study more English.	1	2	3	4
10- A student who speaks English with an almost native speaker accent would feel privileged among his/her classmates.	1	2	3	4

II. English as an International language of sciences (EILS)

	Strongly Agree			Strongly Disagree
1- English should be the medium of instruction at Egyptian schools and universities.	1	2	3	4
2- If an academic text is available in English and Arabic, I will read the text in English.	1	2	3	4
3- I like to study technical subjects in English rather than Arabic.	1	2	3	4
4- When submitting a research, a professor has the right to criticize my English language regardless of the academic content.	1	2	3	4
5- I will improve my English in order to succeed in higher education.	1	2	3	4
6- A NS (native speaker) student of engineering has more advantages than a NNS (non-native speaker) researcher.	1	2	3	4
7- All university books should be taught in their original version with no translation.	1	2	3	4
8- English allows everyone in the scientific field to communicate equally.	1	2	3	4
9- Teaching scientific subjects in English at public schools requires a huge budget.	1	2	3	4
10 - I can understand academic texts in English more than Arabic.	1	2	3	4
11 - Students receive science in a better and exact way when taught in English.	1	2	3	4
12- English enables university students to have better access to reliable articles and scientific papers.	1	2	3	4

III. Sociolinguistic and sociocultural considerations of learning and using English

	Stror Agre	• ,		Strongly Disagree
1- The U.S.A. is the main reason for the dominance of English in the world.	1	2	3	4
2- Naming scientific terms in English and not translating them into Arabic threatens my native tongue.	1	2	3	4
3- English is extensively used in Egypt due to the country's past colonial history.	1	2	3	4
4- Teaching sciences in Arabic at universities will Help keep our national identity.	1	2	3	4
5- Using English extensively in social media and Technology is affecting my mother tongue and identity in a negative way.	1	2	3	4
6- Some Egyptians use English as a sign of higher social status.	1	2	3	4
7- English discriminates between the rich and the poor.	1	2	3	4
8- When someone speaks English, I think he/she is educated.	1	2	3	4

Appendix C: Interview Questions

- 1- When did you start learning English? Why?
- 2- Describe your personal feelings towards the English language.
- 3- Do you feel comfortable to speak English in class?
- 4- Do you think students who graduated from public schools and decide to join AAST will face languagerelated difficulties when studying their academic subjects?
- 5- If yes, do you think English can be a means of discrimination?
- 6- Do you think local languages (like Arabic) should be protected and used in education? Or do you think using English would be more beneficial for the advancement of you/ your country?
- 7- Would you advise all your professors to speak English only in class? Why? Why not?