GENDER AND AGE EFFECTS ON LEXICAL CHOICE IN THE BAGHDADI SPEECH COMMUNITY: A COGNITIVE SOCIOLINGUISTIC ANALYSIS

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Abstrak

Kesan jantina dan umur pada pilihan leksikal dalam sosiolinguistik bahasa Arab didapati bercanggah dan bermasalah. Ini adalah kerana dialek berprestij tidak semestinya jenis standard, atau Arab Baku (SA), dalam dunia Arab. Objektif kajian ini adalah untuk menyelidik unsur-unsur dalaman system linguistik Baghdadi dalam usaha mencapai persefahaman yang lebih baik antara muka di antara sosial dan linguistic dengan menambah pendekatan kognitif. Pendekatan kognitif dalam pilihan leksikal memberi tumpuan kepada makna subjektif atau pengalaman pengguna bahasa individu dalam lingkungan social mereka. Kajian kuantitatif ini dibuat berdasarkan perbezaan dalam pilihan leksikal yang bergantung kepada jantina dan umur di kalangan Baghdadi yang celik huruf. Corak pemboleh ubah leksikal dikenal pasti mengikut pilihan lelaki/perempuan (24 orang lelaki/24 orang perempuan) terhadap item leksikal baru penutur Dialek Baghdadi (BD). Kajian ini juga mengenal pasti apa-apa corak perubahan berdasarkan tiga kumpulan umur (18-24, 30-40, dan 50-60) dengan membandingkan pilihan leksikal mereka. Informan telah dipilih melalui prosedur persampelan penilaian. Pertuturan 48 orang penutur BD telah diteliti dengan menggunakan temu duga bersemuka. Korelasi dan ujian-F telah dikendalikan dengan menggunakan SPSS (Versi 18) untuk memproses data mengenai pemboleh ubah bebas (umur dan jantina) dan pilihan leksikal. Kajian memperlihatkan bahawa variasi tidak berlaku secara mekanikal atau automatik, tetapi berlaku atas pilihan peribadi secara sedar. Kajian ini juga menunjukkan bahawa jantina adalah salah satu factor sosial paling penting yang berhubung kait dengan variasi leksikal. Di kalangan wanita Baghdadi, bentuk linguistik yang berprestij didapati berkaitan dengan bahasa Arab Baku. Oleh itu, wanita yang memilih SA diandaikan mewakili guru-guru bahasa Arab yang kompeten kerana dari sudut linguistik, mereka lebih sedar tentang prestij berbanding penutur lelaki. Kajian masa hadapan boleh menganalisis hubungan antara BD dengan SA dan kesannya ke atas pendidikan di sekolah-sekolah Iraq.

Kata kunci: Sosiolinguistik Arab, Pemboleh ubah leksikal, Pendekatan kognitif, Penutur dialek Baghdadi, Pilihan leksikal

Abstract

The effects of gender and age on lexical choice in Arabic sociolinguistics have been found to be contradictory and problematic. This is because the prestigious dialect is not necessarily the standard variety, or Standard Arabic (SA) in the Arab world. The objective of this study is to delve into the inner workings of Baghdadis' linguistic system in pursuit of a better understanding of the interface between the social and the linguistic by adding the cognitive approach. The cognitive approach to lexical choice is primarily interested in the subjective meanings or experiences of individual language users within their social groups. This quantitative research is based on the differences in lexical choices depending on gender and age of the literate Baghdadis. Patterns of lexical variables are identified according to males'/females' (24 males/24 females) choice of new lexical items of the Baghdadi Dialect (BD) speakers. This study also identifies any patterns of change according to three age groups (18-24, 30-40, and 50-60) by comparing their lexical choices. The informants were chosen using judgment sampling procedure. The speech of the 48 BD speakers was investigated using face-to-face interviews. Correlations and F-tests were conducted using the SPSS (Version 18) to process data on the independent variables (age and gender) and lexical choices. It was found that variation is not mechanical or automatic, but is based on personal conscious choices. It was also found that gender is one of the most important social factors correlating with lexical variation. Among Baghdadi women, the prestigious linguistic form was found to be associated with Standard Arabic. Thus, females who opt for SA can be considered to represent competent Arabic teachers since they are linguistically more prestige conscious than males. Future studies can analyze the relationship between BD and SA and its educational impact on Iraqi schools.

Keywords: Arabic sociolinguistics, Lexical variables, Cognitive approach, Baghdadi Dialect speakers, Lexical choices

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List of Abbreviations

BD	Baghdadi Dialect
BSC	Baghdadi Speech Community
DARE	Dictionary of American Regional English
FMCs	Form-Meaning Connections
LR	Linear Regression
OT	Optimality Theory
SA	Standard Arabic
SPSS	Statistical Package for Social Sciences
SCLT	Social cognitive learning theory
STH	Self-Teaching Hypothesis
VR	Variable Rules

CHAPTER ONE
INTRODUCTION

1.1 Background

The existence of linguistic differences in a speech community has been clearly shown in linguistic research. It has been widely assumed that linguistic heterogeneity reflects differences in the use of linguistic variants corresponding to social groupings. Therefore, language is not a simple tool of communication used in the same manner by all people in all situations. Language is beyond this since speakers mark their personal history and identity in their speech as well as their socio-cultural, economic and geographical coordinates. Thus, sociolinguistics argues that language exists in a social context and it is the human instinct to establish and maintain social identity.

Sociolinguistics as defined by Schilling-Estes (2006, p. 312) is "the study of language in its social context". Generally, sociolinguistics denotes the study of language as a crucial part of culture and society development. Controversial debates on language and social structure usually focus on the influence of the latter on the communication tool. Labov (1966) argued that any such influence is marginal in terms of the linguistic system as a whole. Labov (1966) pointed out that linguistic rules are quite remote from any social value and social values are attributed to linguistic rules only when there is variation. That means, those aspects of dialectal varieties which show variation can be correlated with non-linguistic factors. In 1966, (Labov) concluded that “in general, linguistic behavior and variations which have social significance can be considered

relevant to linguistic structure" (p. 49). Therefore, the linguistic study of variation and change in any given society demands and presupposes some prior understanding of the social structure in that society.

The fact languages vary and change means that there are alternatives available to people. This opens up the possibility to choose one linguistic form rather than another and that choice is determined by social factors. Research has shown that variation was not chaotic, but well-formed and rule-governed. Social factors therefore constitute part of any type of linguistic change because even internal changes involve production on the part of the speaker and perception on the part of the listener. That means, in a sociolinguistic variation situation, people are aware of the linguistic changes surrounding them and are most likely involved in them.

Choice is related to consciousness (of grammatical processes and the like), and thus has some mental realization of what is going on in a social situation in which a speaker switches from one form to another and is noticed by listeners. In support of this view, Cutillas-Espinosa (2004) argued strongly that a speaker can control his/her grammar consciously. For Cutillas-Espinosa, variation is not mechanical or automatic; rather, it is based on personal conscious choices. Many researchers have argued, however, that repetition and frequency may lead to the automatization of words and sequences of words (e.g. Bybee, 2001, 2003). That is, words or sequences of words form chunks in the brain become entrenched in their own representation and thus easier to access and use. In other words, speakers access this stored information along with the form or

structure suitable for the social setting or situation. Labov (1994, p. 604), on the other hand, pointed out that language change is mechanical and automatic when it is “outside the range of conscious recognition and choice.” In this way, any conscious attempt to change language is subject to “higher-level stylistic options” or adherence to social factors and pressures. In this sense, sociolinguistic variation and change are mainly conscious and involve choice. Whether the choice is conscious or automatic, apparently, the linguistic choice of people symbolizes their sense of sociocultural identity.

As far as people's concepts and values change, a need to satisfy that change by the choice of new lexical items is recognizable. When a new word, a new pronunciation, or a new usage occurs in any speech community, it may subsequently spread as far as no serious barriers to communication intervene (Trudgill, 1986). Thus the growth of lexicon can be triggered by the spontaneous creation of new meanings and new forms. Mercer (2000, p. 13) pointed out that "every living language continues to evolve to meet the needs of its speakers". She added that "not only can existing words change their meaning and be combined in novel ways, new words and structures can also be created as they are required".

Societies which face intense social and political changes are always on the verge of instability. This would lead to a number of issues for people that may experience challenges due to aspects like ethnic groupings, religion, education, language planning, and others. Emerson (1966) believed that balance between stability and change can be

best achieved by the fullest freedom of expression. Emerson (1966) argued that words and symbols can work as powerful tools in altering emotions and behaviors.

Iraq is an example of a society which faced social and political changes. Iraq is a Western Asian country bordered by Jordan to the west, Syria to the northwest, Turkey to the north, Iran to the east, and Kuwait and Saudi Arabia to the south (refer to Appendix A). The capital city of Baghdad is in the centre-east of the country. Iraq has a population of 31,234,000 million (Central organization of statistics and information technology, 2010).

As far as Baghdadi society is concerned, the country is a mosaic of communities. There is an old Iraqi proverb that says: "Two Iraqis, three sects". Actually, there is a mix of communities living more or less in harmony reflecting the primary social markers in the early years of Iraq's history as a state (Stansfield, 2007). Baghdad is a multiethnic society that represents different religions (i.e., Islam and Christianity) and sectarian differences as within religions (e.g., between Sunni and Shiat Muslims and Assyrian and Chaldean Christians).

On the aspect of language, all communities in Iraq share the same dialect which is Iraqi Arabic differentiated by a specific Iraqi vocabulary and accent. Of course, there are differences between rural and urban varieties which also cover the prestigious and stigmatized ones. Although, minorities in Iraq speak different languages, they all use Iraqi Arabic as a means of communication with others in the Iraqi society.

Beginning with an occupation in 2003, Iraq came under military occupation which is primarily composed of American and British military units. Stansfield (2007) stated that Iraq, in an era of invasion, was not only a country divided by religion and ethnicity but also considered a broken society. He added that these divisions have been deepened and complicated by a quarter century of war and deprivation. Iraq's standard of living has fallen to its lowest level while the economy collapsed under the weight of UN sanctions. Since 2003, Baghdadis have lived in a panic. Al-Jawaheri and Simon (2008) together with Stansfield (2007) referred to the fact that after the fall of Baghdad, the country has undergone systematic theft and destruction. Sudden influx of crime, the number of kidnappings, robberies, bomb assaults and shootings increased dramatically.

This research is based on the assumption that there is political and social impact on the linguistic behavior of Iraqis after 2003. The political and social changes affect the linguistic word choices. In Baghdad, political, socio-psychological, and economic changes led to create new meanings and new forms of words; internal immigration and the appearance of religion men led to lexical borrowing (Jaber & Krishnasamy, 2012). Hence, new lexical items emerge in the Arabic dialect spoken in Iraq; that is, creating new meanings based on existing items; creating new forms by means of derivation and thus new meanings; and borrowing from English and Standard Arabic.

In this study, it is believed that variations and changes in speakers' linguistic behavior of Baghdadi Dialect can be clearly exemplified in two social variables namely gender and

age. The existence of observable differences in the way a language is used in the Baghdadi Speech Community (BSC) is clearly shown in male over female linguistic pattern comparisons. In addition, differences can be seen in the age pattern as well. Undoubtedly, old people do not behave linguistically similar compared to younger ones. Therefore, in order to study variations it is intended to compare the speech of men and women. Meanwhile to study any other changes, the study also focused on the age factor comparing the speech of different age groups. In summary, the speech of forty eight (48) speakers was put under investigation for the fulfillment of this study's goal.

Using quantitative methods that are typically considered appropriate in variationist sociolinguistics (i.e. correlation and regression), this thesis correlates variation in the choice of new 12 lexical variables with gender and age. It is therefore necessary to be able to explain the outcome of the quantitative analysis by invoking principles of a theoretical framework. The aim of this thesis is therefore to show how people in Baghdad behave linguistically in their adoption of new lexical items to appear prestigious, religious or tough by investigating the effects of gender and age on lexical choice. By using quantitative approach, it is able to show patterns of variation and change in a modern urban city such as Baghdad and thus this study follows Labov's quantitative paradigm.

In addition to the sociolinguistic analysis, this study is an attempt to delve into the inner works of our linguistic system in pursuit of a better understanding of the interaction between the social and the linguistic by adding the cognitive approach. This study

investigates the concept of *cognition* to understand differences in lexical choice and shape out the direction of gender pattern. Frequency of some words has played an important role in the entrenchment of mental categories stored in the memory of speakers and controlled by social pressures. The main objective of adding the cognitive approach to an analysis of variation and change is to reach an explanation of linguistic variation and change in the BSC and an approach to linguistic theory.

The innovation of new lexical items and the supposed differences between males and females; older and younger speakers motivated the researcher to investigate this phenomenon and to map the assumed patterns of lexical variation and change.

1.2 Statement of the Problem

The effects of gender and age on linguistic choice in Arabic sociolinguistics are contradictory and problematic.

Arabic language has two distinctive varieties: The first is the High variety that is the Classical Arabic used in formal occasions and literary and religious functions; the second is the Low variety that is used in everyday conversation such as between friends and at home. The Low varieties are distributed into twenty-one different regional Arab countries. Discourse across dialect boundaries is carried out in a modernized form of classical Arabic, referred to as Standard Arabic (SA). Therefore, there is always a comparison between the local variety and the standard one as far as males / females' use of one variety rather than the other is concerned and according to which the gender pattern and prestige is being evaluated. Many of Arabic studies have concentrated on

the use of the two varieties; that is the standard and the vernaculars in Arab societies putting in advance that Standard Arabic is the prestigious variety (Abd-el-Jawad, 1981; Abu-Haidar, 1989; Bakir, 1986; Haeri, 1991; Jaber, 2005; Taqi 2010) and that made the confusion in Arabic sociolinguistics. This might be explained because Arab scholars relied on Western methodologies and theories which should not be applicable in the Arab world because the prestigious dialect is not necessarily the standard variety which seems to be reversal from the general Western pattern. In Western research, it has been established that standard variants are the prestigious forms of language and thus considered the target of hypercorrection (Deuchar, 1988; Fasold, 1990; Gordon, 1997; Labov, 1998).

The situation in the Arabic sociolinguistics has taken another direction when a variety in an Arab society is considered the prestigious dialect; whereas another variety is stigmatized although it has standard features such as the study of Jaber (2005) and Holes (1983) in Bahrain where he found that although the speech of Shiat Baharna has standard features yet it is stigmatized. In this respect, prestige cannot be used interchangeably with standard in sociolinguistics, for the linguistic varieties that are socially stigmatized for one group in an Arab community may not be for the others in the same or a different Arab community. Indeed, different studies in different Arab countries show different patterns and different explanations for what is prestigious in one country might be stigmatized in another country.

Sex and gender studies in the Western world have reached a universal sociolinguistic phenomenon. One of the sociolinguistic patterns established by quantitative research on urban dialects was that women of the same social class use more standard forms of language than men (Cofer, 1972; Eckert, 1991, 1996, 2003; Labov, 1966; Romaine, 1994; Tagliamonte, 2006; Trudgill, 1974; Wolfram, 1969). On the other hand, men try to approximate more closely to the working class life due to reasons of toughness and masculinity (Trudgill, 1972). However, the sociolinguistic gender pattern in Arabic studies has followed a different direction. In many studies of [q] variant in, Iraq, Jordan, Syria, Lebanon, Palestine Egypt and Kuwait (Abd-el-Jawad, 1981; Abu-Haidar, 1989; Al-Wer, 1997, 2005, 2007; Kojak, 1983; Bakir, 1986; Habib, 2008; Haeri, 1987, 1991, 1996; Jaber, 2005; Salam, 1980; Taqi, 2010) proved that they were men not women who used the standard variants. However, females' use of non- standard features does not entail that women are not conscious of status. In Bakir's (1986) study in Basra, the south part of Iraq on females/ males' use of the [q] variant, he found that although women used less standard variants, yet they associated themselves more with the prestigious Arabic dialect in Iraq; that is Baghdadi Arabic. He explained the point that "in the formal domain of women, the prestigious linguistic form would certainly not be a form that is associated with formality, i.e., Standard Arabic, it is the variety of Colloquial Iraqi Arabic used in Baghdad" (p.7). This general reversal from the western gender pattern made Ibrahim (1986, p. 116) to conclude:

> Unlike women in the rest of the world, Arabic- speaking females tend to approximate Standard Arabic to a lesser degree than Arabic-speaking males. This conclusion is problematic because it is predicted on the false assumption that standard and prestigious Arabic are one and the same variety.

A different gender pattern and explanation in the same country; that is Iraq is shown in Abu-Haidar's (1989) study in Baghdad. She found that women used a high percentage of standard features than men did. A study which is considered an opposite pattern to other Arab investigations has been given a clear explanation that "In Iraqi society today, where sex roles are not so clear-cut and both sexes enjoy similar social privileges, women are more prestige conscious than men, since it is mostly women who opt for the prestigious speech varieties" (p. 479).

Based on Arabic sociolinguistics, gender studies in the contemporary Arab societies have shown different patterns (Abd-el-Jawad, 1981, 1986; Abu-Haidar, 1989; Bakir, 1986; Habib, 2008; Haeri, 1987, 1991, 1996; Jaber, 2005; Kojak, 1983; Salam, 1980; Taqi, 2010). There is neither a unitary interpretation nor does exist a general model or pattern. This can be explained due to the fact that in each Arab country there is a local variety (not necessarily having standard features) which is considered prestigious and to which females directed their speech.

1.3 Research Questions

Based on the problem statement of the study, the research explores and measures the effects of gender and age on lexical choice in the dialect spoken in Baghdad. This research interest has been formulated based on the following research questions:

i. Is there a significant difference in the lexical choice in terms of gender among educated Baghdadis?
ii. Is there a significant difference in the lexical choice in terms of age among three age groups of educated Baghdadis?

1.4 Research Objectives

The research, in general, attempts to identify and explain patterns of lexical variations and change according to specific factors and changes in the Baghdadi Dialect (BD). This study incorporates other primary aims:

i. Identifying patterns of lexical variation according to males / females' choice of new lexical items of the BD. The aim is to show the social pressures and values attached to males / females' choice.

ii. Identifying any patterns of change according to three age groups. The aim is to show if the new lexical items can be considered as long-term innovations through language evolution by comparing the lexical choices among older, middle-aged and younger speakers.

1.5 Research Hypotheses

The quantitative approach that examines patterns of variation and changes in the BD is based on deductive logic that begins with one or more premises that the researcher initially takes to be true. Accordingly, this research is based on the following hypotheses:

H1 There is a significant difference in the choice of lexical items in terms of gender among educated Baghdadis.

H2 There is a significant difference in the choice of new lexical items in terms of age among three age groups of educated Baghdadis.

1.6 Significance of the Study

The topic selected for investigation and analysis is of great interest to sustain motivation. A few studies on variation and change of lexical items have been conducted in the Western academia in general and Arabic sociolinguistics in particular, which is why the choice of lexical items in Baghdad was of particular interest to this research. As an example, Malt, Barbara, Steven, Silvia, Meiyi Shi, and Yuan Wang (1999, p. 242) investigated what names participants gave to real-world objects. Researchers were primarily interested in variations across linguistic communities; however, they discovered that even within a linguistic community there were differences in how participants named objects. They stated that only 2 of the 60 objects in their study were given the same name by all of their 76 native-English speaker participants.

In the lexicographic field, field-workers for the Dictionary of American Regional English (DARE) (Cassidy & Hall, 1996) asked a representative sample of Americans to respond to fill-in-the-blank questionnaires. The responses they received revealed substantial differences among participants. For example, there were 228 different responses to question B12: When the wind begins to increase, you say it's -------, the most common of which were getting windy and blowing up. Parikh (1994) made a similar point with a simple experimentation. For example, he showed squares from the Munsell chart to participants and asked them to characterize the squares as red or blue; different individuals characterized the squares in different ways.

Academically, little attention has been paid to sociolinguistic investigation on Arabic dialects. Indeed, lexical choice is rarely treated in Arabic sociolinguistics. That is because Arabic sociolinguistics in general and gender studies in particular are based on phonological data. The phonological variable (q) is the most inspiring studied variable that has received a lot of attention in scholarly investigations. However, the study of lexical items is limited to a few studies which focused on the appearance of loan words from English in the Standard Arabic. This is reflected in the study of Alomoush (2010) who investigated the adaptation of English loan words in Jordanian Arabic and the study of Ibrahim (2006) who studied the English loan words in the written texts of an Egyptian magazine.

Generally, lexical variation has not been the focus of linguistic studies of Arabic sociolinguistics except that of Abu-Haidar's study (1989) in Baghdad. Abu-Haidar investigated six variables: SA passive forms; substituting ordinal numbers for months of the year; the SA adverb 'lamman'; SA adjectives; SA forms instead of corresponding loanwords; and SA forms instead of their well- established dialect equivalents.

This thesis has moved beyond a description of an approach towards an account of variation that can explain both social and linguistic phenomena. It attempts to show that the study of lexical choice may have wider theoretical importance in providing a possible avenue for exploring the interrelations of social and language structures in

situations of rapid social change in complex urban societies, such as Iraq. The cognitive analysis that was added to the study can help understand associations and hence provide input for educational system developers to enhance learning in Arab schools and develop teaching programs. Although this is not a goal to be reached in this thesis, but the findings and the motivation behind this type of learning is that speakers are constantly exposed to variation in the output they receive as input. This would influence their acquisition process and their next set of outputs. In other words, it will influence the percentages of the occurrence of each of the variants in their speech. Therefore, the study has gone some way towards enhancing our understanding of people's conscious and automatic levels of lexical choice through constant exposure to stable input that fuses knowledge to people (children in particular) as far as Standard Arabic is the language of education. This is considered as an improvement of Arabic language as national teaching language in Iraq.

In addition, the research has significant points that can be considered as a contribution to literature in its more general aim. This study is an attempt to find out patterns of sociolinguistic variation and change in the Arabic variety spoken in Baghdad. Therefore, it is hoped that this study adds to the existing body of knowledge, bridges current gaps and provides an analysis to the new speech phenomenon that occurs in Iraq since 2003. The choice of the social variables, gender and age will give an overall image of political and social impact on people in Iraq which was reflected in their linguistic behavior. Therefore, the effects of gender

and age on the choice of lexical innovations are given new explanations and thus adding to the existing knowledge of some concepts in Arabic research.

Accordingly, this study deals with the emergence of new forms and thus new meanings; with words that underwent semantic shift; and with new borrowed lexical items from English and Standard Arabic. The focus of this study therefore is to investigate the variation and change of the new twelve lexical items chosen by people after 2003 in Baghdad.

1.7 Scope of the Study

This study is limited to the investigation of linguistic phenomena in Iraq after the events of 2003 War. Baghdad, the capital of Iraq, is the locus of the research study. It is chosen because as a capital, it represents a good sample of language variety considered to be one of the prestigious varieties in the Arab World. It also represents a good sample of people who faced political, religious and social impact changes. It is a place of great significance for changes that occurred since 2003. Therefore, the speech of 48 speakers (24 male and 24 female) of three age groups (18-24, 30-40, and 50-60) is being put under investigation.

This study is limited to the study of the new 12 lexical items (refer to 3.6) that have efficient value in showing patterns of variation and change. The main core of this research is to measure the relationship between the choice of linguistic variables with the age and gender of the 48 informants. All the informants in this study are

educated because approximation to Standard Arabic entails a particular level of education.

1.8 Limitations of the Study

This study does not cover all the possible social factors that could be involved in the variation of BD under investigation. Choosing social factors, namely gender and age and excluding others is based on some criteria.

First, social class is a category that has received regular attention from the earliest sociolinguistic studies such as that of Labov (1966), Trudgill (1974), Macaulay (1977), and Feagin (1979) and has continued to be examined in later studies such as the study of Haeri (1997), Habib (2008), Labov (2001) and McCafferty (2001). However, the social class variable raises two problems. First, there is the problem of the number of classes; second, there is the problem of identifying the membership of each class. The social class can be calculated according to the index scores of occupation, education, and income. In most cases, sociolinguists adhere to the categories that are identified by sociologists or political scientists.

Social class is a very hazy concept in the Arab World; many factors may play a role in determining someone's class (Habib, 2008). In addition, the social mobility existent in most societies affects a person's classification within one social class or another (Haeri, 1997; Labov, 2001). This is particularly true of Arab societies because of the great influx of migration from rural areas to urban centers. Most urban centers are associated with more prestige, better life style, and civilization.

Consequently, a change from being a farmer to being a white-collar worker influences a person's social classification. Also, being the son of a farmer and becoming a medical doctor affects that person's social status. Habib (2008) in her study on the effect of urban centers on rural migrants in Syria commented that:

> Given the hazy definition of social class in the Arab world, the lack of studies that refer to class division and the possibility of social mobility because of migration from rural to urban areas and obtaining higher academic degrees have left a big confusion in Arabic literature.

In Habib's study (2008), this social classification was based on social indicators: family income (mainly breadwinner income), education, occupation and residential area. Twenty-three participants are in the upper-middle class, and twenty-nine participants are in the lower-middle class. Habib found that although there are more professionals and bachelor's degrees in the upper-middle class category, the difference is slight in that it does not reflect an association between education and social class. The Chi-squared test showed the existence of association between income and social class. The low p-value indicates low association between social class and occupation.

Social class in Arab world plays a major role in linguistic variation. However, there are very few studies conducted due to reasons associated with the social structure of Arab countries and the lack of highly confirmed social standard parameters to determine social classes in each Arab country. This led many sociolinguists to avoid the social class variable and concentrate on the education variable. Yet, two attempts have been made by Holes (1983, 1987), for example, to study the language of the

upper-ruling class in Bahrain and found evidence that the direction of change is towards the dialect of that upper social class.

Haeri (1997) studied palatalization in Cairene Arabic in different social classes. However, she gave no explanation for the choice of social classes neither did she support her work with ethnographic documents or statistics. The choice of the upper social class is based on the fact that this class is oriented towards western culture in their high life style. Haeri (1997) interviewed twenty five females and twenty four males in Cairo, the capital of Egypt. She recorded informants and elicited 400 tokens of words with palatalization. Haeri reached two conclusions. First, the phenomenon of palatalization is mostly used by women. She stated that "women have frequent and advanced palatalization, while men have little palatalization in their speech" (1997, p. 68). The second conclusion is that the upper middle class (UMC) women exhibit weak palatalization in their speech. It is the speech lower middle class (LMC) and middle middle class (MMC) that shows strong palatalization. Haeri added that this stylistic phonological variation seemed to be an innovation of upper class women and then adopted by LMC and MMC as it was thought to be a prestigious feature as long as it was an innovation of UMC.

In Iraq, In terms of social class there is great disparity between rich and poor. Those who compose the high class in society of Iraq are essentially chosen by the government, since there is no opportunity to start a business or make a name for oneself without the endorsement of the government (Makiya, 1991). The once-

dominant middle class of the 1970s has deteriorated in the face of economic crisis at the beginning of the 1980 and upwards. These people, who are very well educated, perform unskilled labour and have joined the ranking of the majority lower classes. In the Republic of Fear (1991), Makiya has discussed many points thoroughly such as Iraqi politics, economics, social classes and many other social issues.

The variable *social class* is excluded from the study due to two reasons. First is with regards to documentary support: there are no social studies of highly dependent standard parameters that give a real picture of social classes in Iraq. Second is with regards to the reality of social classes: it is not clear how accurately do people's annual incomes reflect their social class.

The second variable which is excluded from this study is the *literacy variable*. The first outline and the focus of this study was to investigate the speech of male / female, three age groups and literate and illiterate informants. However, during sampling and data collection, the illiterate informants (those who have no formal education) refused to be interviewed and all efforts made by the researcher to convince them explaining the importance of research were useless (refer to3.7).

The third limitation in this study is concerned with research methods. The general difficulties associated with research methods in Baghdad restricted the alternatives available for conducting a quantitative research. Some methods, those related to sample size and data collection, have been changed as researcher has inexperience in

conducting interviews in a warzone that also hindered data collection. Warzones present a different environment for interviewers. However, with no prior preparations in terms of training which was necessary in order to approach the Baghdadi community, many difficulties emerged. Poor infrastructure such as bad roads, inefficient communications and lack of electricity are characteristic of the situation in Baghdad and they play a role in data collection for this research study. Such challenges make research conducted in warzone extremely costly and time consuming.

There is also the issue of communication barriers in Baghdad, this called for the use of key local informants during interview sessions. This is because of the various different backgrounds of people ranging from ethnicity to religion, loyalties and language capabilities. This together with illiteracy among the possible informants made face-to-face interviews extremely difficult and was thus restricted to collecting data from only the literate informants. Those who did not want to be interviewed cited many reasons of concern such as their safety and demanded anonymity while others were totally uncooperative.

The security situation in Baghdad is not conducive for efficient data collection through face-to-face. Explosions from bombs and grenades are a common feature, gunshots fired by fighters from the military and the various insurgent groups do not help in guaranteeing the safety of both the researchers and the respondents. For this reason, the researcher must organize safe locations for conducting interviews which

are hard to come by. So threatening is the security situation that the researcher had two interviewees killed in a roadside suicide car bomb attack as they were travelling to meet the researcher for an interview. These incidents are not isolated given the ever worsening security situation in Iraq.

Insurgent groups with different ideologies coordinate these attacks on their enemies and the enemies also respondent with similar or other forms of attacks. Groups such as Al Qaeda, Jaysh Al Islam and Jaysh Mohammed use four major types of attacks on their targets. They attack the infrastructure and government organizations, they use bombs both found and exploded, they use snipers, lay ambush, grenade attacks, also use rocket, mortar and surface to air attacks (Cordesman, Mausner, & Derby, 2010). This implied that most people were unwilling to participate in the interviews fearing for their safety around the city.

Travelling across the city or holding meetings with informants was also difficult as several militia groups stop vehicles for inspection and interrogation, and there are consequences including executions for those found collaborating or giving out information to foreigners. Such challenges and the fact that the researcher could not guarantee the safety of the informants made data collection for this research work extremely difficult in Baghdad.

While fieldwork in warzones has not been without its difficulties, the present issues in the wake of wars in places such as Iraq have highlighted new difficulties and

challenges faced. While those people who accompanied the researcher may consider carrying weapons for personal safety, it is advisable to stay neutral without being armed in order to work better and avoid suspicion from the locals.

The provision of basic services within the city was generally poor as perennial electricity blackouts affected data collection as the electric gadgets used for recording interviews always needed to be powered. Furthermore poor road and communication networks within the city made it more challenging in moving from place to place and coordinating communication in efforts to set up interviews. This coupled with illiteracy, as mentioned, restricted the interviews only to the literate who understood better the importance of the study. This in turn meant that the researcher could not interview a wider population group as intended for a better and conclusive study.

The experience in Baghdad meant that data collected for the study was done under extremely challenging environment, the study took more time to conclude and the cost of the study was more than was initially planned. Despite difficulties, the data presented in this study was drawn from forty eight informants. These informants are divided according to gender (male, female) and three age groups (18-24, 30-40 and 50-60).

1.9 Operational Definitions

Nine definitions of the conceptual framework of this study are presented in alphabetical order. These are:

1. In this research, *Arabic dialect* refers to a particular use of a particular linguistic style in a certain environment, and this environment belongs to a larger community which uses one common language (Abu-Alfaraj, 1966).
2. *Cognition* is a notion that is defined by all the disciplines currently integrated under the label *Cognitive Science*, such as psychology, linguistics, philosophy and logic as well as the brain sciences. *Cognition* is defined as the set of functions of the mind, such as thought, perception and representation. Cognitive linguistics assumes that people's interaction with the world is mediated through informational structures in the mind (Geeraerts & Cuyckens, 2007). In this study, social cognition and a usage-based approach of the cognitive theory are considered an integral part in explaining sociolinguistic variation and change.
3. In this research, *Diglossia* is a socio-politically regulated linguistic situation, where one linguistic variety has a higher status than another (or others), and in which linguistic functions are partitioned between the two (Owens, 2001).
4. *Language change* refers to the new words, new pronunciations, new grammatical forms and structures, and new meanings for existing words that are always coming into existence, while older ones are always dropping out of use. (Trask, 1999).

5. In this research, *Lexical item* is a single word or chain of words that forms the basic elements of a language's vocabulary (lexicon). Lexical items can be generally understood to convey a single meaning (lexeme), but are not limited to single words. They are natural units in learning a new language or variety of language. The entire store of lexical items in a language is called its lexis (Lewis, 1997).
6. *Prestige dialect* is a dialect spoken by people with the most prestige in a language community. Someone who speaks a prestige dialect is perceived to be of a higher social class than people who speak other dialects. As a general rule, prestige dialects are associated with greater political, social, and economic power, and people who speak them are typically well-educated (Ibrahim, 1986). One reasonably well-known example of a prestige dialect is the Standard Arabic: the form of Arabic which is spoken and written by educated Arab speakers. Standard Arabic is also the dialect typically used on Arabic television and radio, with the goal of being accessible to the greatest number of viewers and listeners. However, for children and illiterate old people who speak regional dialects of Arabic, Standard Arabic can seem almost incomprehensible at times, because it is such a markedly different dialect.
7. In this research, *Speech community* is the human aggregate of any kind which is characterized by regular and frequent interactions by means of a shared body of verbal signs and set off from aggregates which are similar by significant differences (Ahearn, 2011).

8. *Standard language* is the kind of variety which would count as a proper language; however, it is the result of a direct and deliberate intervention of society. This intervention is called *standardization* (Hudson, 1980).
9. *Variation* is the existence of observable differences in the way a language used in a speech community. It is a common place observation that a single language is not used in a totally homogeneous manner within a single community. Men do not speak like women; older people do not speak like younger people. Moreover, even the speech of a single person is not homogeneous: one does not speak in the same way when s/he is chatting to friends and when s/he is being in a formal setting (Trask, 1999).

1.10 Definitions of Technical Terms

In this section, the elementary statistical concepts that provide the necessary explanation for data analysis in this study will be briefly defined:

1. *Correlation* is a measure of the *relationship* between the variables; that is, how well changes in one variable can be predicted by changes in another variable.
2. *F-test* is a test of significance used as an analysis of variance tool and also as a regression tool. It is used to test whether all, or several, statistical coefficients that can be calculated are zero or nonzero. It does this by calculating and comparing what are called generalized *sum of squares*, a principle that many statistics are based on. In the case of testing a single coefficient, the F-statistic is the square of the t-statistic, and they are interpreted similarly.

3. *Mean value* describes the *average* calculated over an entire population. It is therefore a parameter, and the average in a sample is both a descriptive statistic and the best estimate of the population mean.
4. *Null hypotheses* or *"no difference":* Because a hypothesis can never really be proven, it often sets out to disprove an opposite hypothesis. When it is hypothesized that there will be *no* differences between groups, *no* consistent relationships between variables, or, more generally, *no* patterns in the data, a *null hypothesis* is being formed. Null hypotheses are used primarily during statistical analyses. A research hypothesis is usually supported by showing, statistically, that its opposite—the null hypothesis—probably is *not* true.
5. *Pearson correlation coefficient (r)* measures the strength and direction of the linear relationship between the two variables.
6. *P-value* is the probability that the observed relationship (e.g., between variables) or a difference (e.g., between means) in a sample occurred by pure chance (luck of the draw), and that in the population from which the sample was drawn, no such relationship or differences exist. Using less technical terms, the statistical significance of a result tells something about the degree to which the result is *true* (in the sense of being representative of the population) (see Brownlee, 1961). In many areas of research, the p-value of .05 is customarily treated as a border-line acceptable error level.
7. *R-squared* or the *coefficient of determination* is the percentage of total response *variation explained* by the independent variables.

8. *Standard deviation* represents a set of numbers indicating the *spread*, or typical distance between a single number and the set's average.

1.11 Organization of Thesis Structure

This study explores and measures the effects of gender and age on lexical choice in the BSC using quantitative methods. To achieve this goal, the study falls into six chapters:

Chapter I is the introduction which involves the preliminaries of the study. The statement of the problem, which is of a twofold direction, presents a problem in theoretical approaches that link language structure with social use. It also discusses the gaps of linguistic variation and change in Arabic sociolinguistics. Questions, research objectives, hypotheses and significance of the study have been determined. Scope of the study and definition of operational and technical terms are submitted in addition to the design of the thesis which was outlined.

Chapter II is devoted to the review of related literature to explain the statement of the problem. Here, the chapter discusses a number of attempts to bridge the gap between sociolinguistics and linguistic theory from several different theoretical perspectives. This chapter also explains the mechanism of linguistic variation and change through the study of Western research and regional Arabic dialects. The problems of equating prestige with the standard forms that made the big confusion in Arabic research are also presented along with their correlation with non-linguistic factors.

Chapter III includes the paradigm and design of the research. There is also a section that focuses upon the social variables that are assumed to be responsible for linguistic variation and change in the Arabic dialect spoken in Baghdad. Moreover, there is also an explanation of the 12 linguistic variables chosen to be correlated with the social ones. Finally, a special focus is upon the methodology being used in fieldwork. It shows the procedures of choosing the sample and its size; obtaining speech from the informants and the steps that are to be followed during interviews. Data and the procedure of data analysis along with ethical issued are presented.

Chapter IV is devoted to data analysis and interpretation. The analysis of data that requires statistical procedures is presented. The findings of the study in the order of the 12 lexical items are discussed. In this chapter, the effects of gender and age on lexical choice are measured and analyzed. Data is analyzed in depth to give meaning to the data presented and statistical descriptions represented by tables and graphs are stated.

Chapter V involves the study of mental representations of people when they choose words in verbal interaction. For this reason, a focus will be led in this chapter on the value of the fundamental importance of the analysis of *cognition* in the analysis of lexical variation choice. This chapter also shows how lexical frequency has played a prominent role in usage-based models of language structure: its variation and change. Then, this chapter shows the triadic relationship between the *mind*, *language* and *society* and the implication of this linkage in education and the process of acquisition and learning. Finally, this chapter shows the effects of *word frequency* on teaching L1 and L2.

Chapter VI includes the summary of the study, conclusions and suggestions. The summary describes the findings reached from analysis of statistical data. This chapter highlights the objectives, hypotheses and research questions of the study by presenting the effects of the independent variables, mainly gender and age on the choice of the 12 lexical variables. Then, the theoretical and practical contributions of the study due to implementing the cognitive approach to the sociolinguistic analysis are identified. It concludes the study and presents the final outcome of the research followed by some suggestions for further studies. Finally other things like references and appendices lists tailed at the end.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

The second chapter focuses on the review of related literature, starting from broad underlying theories to the major conceptual framework and specific concepts.

Chapter two sheds light on two crucial points. The first point represents a detailed analysis on linguistic variation and change. Variability and quantitative paradigm make researchers examine in a systematic and accountable way the relationship between linguistic variables in any speech community and social variables such as, gender, age, social class, and other prominent factors. The quantitative paradigm shows that sociolinguistic variation in heterogeneous large cities as well as small speech communities is socially regular.

The second point explains Arabic sociolinguistics and the problems of prestige and standard that made the confusion in Arabic research. This chapter also explains the general parameters used in Arabic quantitative sociolinguistic study, including the ways in which the major social categories of age, gender, education and social class have been employed to chart linguistic variation and change but always in comparison with Western studies.

2.2 Variation and Change

People use language to express feelings and elicit meaning (Lyon, 1968, p. 424). Therefore, language is the tool by which people articulate themselves and delineate themselves from others. Hudson (1980, pp. 195-197) argued that there are social and cultural dimensions to the choices people make in order to locate themselves in a 'multi-dimensional social space'. He added that speakers send out 'social signals' that are used as source of information about the speaker's social characteristics. Thus, sociolinguistics argues that language exists in social context and it is "a very social phenomenon". (Trudgill, 2000, p. 21).

One of the facts about language is that it is continuously changing and such a change can occur on a phonological level, grammatical level, or lexical level. Therefore, observing variation in language is vital for understanding language change. Adding to this, the choice made by individuals to mean what they like is constrained by the significance of a social group (Halliday, 1975). Because speech is used as a symbol of group membership, people are evaluated according to the social group they belong to. The main point of such argument takes us back to Hudson's (1980) concept of 'linguistic prejudice'. Belonging to a particular group is the social characteristics that people share such as religion, gender, age, region of origin, race, occupation, interests and many other factors. In addition, "the underlying cause of sociolinguistic differences, largely beneath consciousness, is the human instinct to establish and maintain social identity" (Chambers, 2003, p. 274).

2.3 Sociolinguistics and Linguistic Theory

The division between sociolinguistics and linguistic theory that has been dominant in twentieth century linguistic research can be traced to the *structuralist* movement and the work of Ferdinand de Saussure, while the key figure in sociolinguistic research is the sociolinguist William Labov, who in the 1960s began a series of studies of variation in language.

2.3.1 Linguistic Theory

In *A Course in General Linguistics* (1974 [1916]), Saussure explained that language is a dual activity on many levels; it is a combination of articulation and perception; sound and meaning; individual and social; present and past (1974, pp. 8-9). Therefore, Saussure made a fundamental distinction between 'langue' and 'parole'. Langue is described as the abstract formal linguistic system which exists in the mind of every speaker or, more accurately, community of speakers; it is acquired in the community and every member of that community will share an identical homogeneous langue (pp.13-14). Parole, on the other hand, is the realization of actual speech. It is an act of individual that includes not only the physical act of speech on the part of the individual speaker but also the "combinations by which the speaker uses the code of the linguistic system in order to express his own thoughts" (p. 14). All linguistic variation was therefore relegated to parole and considered unimportant to the 'true science' of language. Saussure's description of the division between langue and parole in syntax is arguably even more questionable. For Saussure, the act of constructing sentences was the product of the individual speaker because individuals can produce completely new sentences with each utterance (p.

125). He therefore regarded sentence structure primarily within the domain of parole, with some exceptions. Saussure and the structuralists were therefore responsible for introducing the dichotomy between language structure and language use but it was Chomsky and the *generativists* who carried this idea forward.

Generativists had noticed variation in peoples' performance but they were inclined to dismiss it as insignificant to linguistic descriptions. It is Chomsky's (1965, p. 3) idealized way in approaching language that aims to specify the universal principles which characterize the innate structure of language. Chomsky's linguistic theory is:

> Concerned entirely with an ideal speaker – listener, in a completely homogeneous speech community, who knows its language perfectly and is unaffected by such *grammatically* irrelevant conditions as memory limitations, distractions, shifts of attention and interest, and errors (random or characteristic) in applying his knowledge in the language of actual performance.

Chomsky believed that syntax was more than simply a system of inter-related units that follow certain patterns. Chomsky argued that the relations between units are rule governed and systematic. Rather than abandoning the langue/parole distinction, he strengthened it further by advocating a more rigid dichotomy between 'competence' and 'performance' (pp. 3-4). This is described as the distinction between "the speaker-hearer's knowledge of his language" and "the actual use of language in concrete situations" (p. 4). In other words, the former relates to the mental structures that govern linguistic behavior and the latter to linguistic behavior itself. In many respects, competence is similar to Saussure's concept of langue but unlike langue, competence includes not only knowledge of specific linguistic elements (or signs)

but rules of the system. For Chomsky, linguistic competence is biologically determined and universal and it is a property of the individual, not the community. This has been articulated as the *innateness hypothesis* i.e. the assumption that language structures are not learned, they are innately present in the human mind and they are triggered by linguistic input. Like Saussure, Chomsky argued that the structural characteristics of language must be the linguists' primary object of concern. The purpose of linguistic theory is to describe the combinatory rules or *generative grammar* of a language.

Indeed, Chomsky's theory has been criticized for decades by researchers such as Hudson (1980, p. 6) who referred to this idealism as 'imaginary world'. Moreover, Trudgill (2000, p. 27) considered the speech homogeneity as a 'mythical concept' due to the fact that "all languages are subject to stylistic and social differentiation, because all human communities are functionally differentiated and heterogeneous to varying degrees". In addition, Coupland (2001, p. 31) added the fact that Chomskyan descriptive theory keeps language apart from individual – society relations. It was concluded that the social situation is the most powerful determinant of verbal behavior and for this solely reason "the American Education fails over the course of two hundred hardworking years to produce a single homogeneous Standard American Spoken English" (Elgin, 1992, p. 106). Other criticisms can be clearly seen in the works of Halliday (1973) and Hymes (1979).

2.3.2 Sociolinguistic Theory

As opposed to the ideal speaker – listener, the social dimension has been added. It was only in the first works of Uriel Weinreich (1963), Charles Ferguson (1959) and Joshua Fishman (1965) that attention to topics such as *diglossia* and *language contact* was drawn. But the key figure here is arguably the sociolinguist William Labov, who in the 1960s began a series of studies of variation in language.

Variationist sociolinguistics has evolved over the last five decades as a discipline that integrates social and linguistic aspects of language. The aim was to present a model of language which could accommodate the paradoxes of language change. Weinreich, Labov and Herzog (1968) pointed out that the idea that language is structurally sound is difficult to resolve with the fact that languages change over time. Weinreich, et al. (1968, p. 98) stated that the "structural theories of language, so fruitful in synchronic investigation, have saddled historical linguistics with a cluster of paradoxes, which have not been fully overcome". This initiated Labov (1972a, p. 185) to call that paradox as the ‘Saussurean Paradox’ because de Saussure believed that *langue* (competence) is homogenous while *parole* (performance) is heterogeneous and as such *langue* can be studied with the absence of community speakers. Indeed, the study of variation and change proved that natural languages are never stable or uniform and that much of what is describable as language change is the product of social synchronic variation. It is the social factors that are undoubtedly far more important than one once thought to be.

In the 1960s, Labov began to make variation a central object of investigation and the result has been a revolution in linguistics. Variationist studies show strong correlations with social variables such as social class, age, gender and others to be prominent feature of sociolinguistic investigations.

By correlating linguistic and social variables, it will able to obtain a clear picture of social dialect differentiation. An enormous amount of research has now been generated under the heading of *sociolinguistics* in a number of different languages and societies which entirely disprove Chomsky's assumption and quite clearly show that linguistic variation is primarily not random noise that can be assumed away as errors of performance. Rather, it is often possible to show variation as having 'orderly heterogeneity' (Weinreich, et al., 1968); linguistic variation is often indicative of the interface between language and society.

It seems quite clear that any linguistic theory that attempts to realistically model the facts of human language can only do so by recognizing that language is both variable and structured. Most of these studies follow the general model provided by Labov's (1966) study in New York City. Trudgill (2000, p. 29) referred to the significance of Labov's assumptions and methods stating that "many other studies of urban dialects have been made in many parts of the world, on the same sort of pattern".

Throughout decades of sociolinguistic studies of variation, a great shift in views took place, a shift from viewing language as reflection of the social to viewing language as creator of the social (Eckert & Rickford, 2001). The shift started with Labov's (1966, 1972a; Trudgill, 1974) view of style variation as different levels of attention paid to speech and ended with the constructivists' view of the use of style to project a self-image and to construct identity and social meaning (Cameron, 1998; Coupland, 1985, 2001; e.g., Eckert, 1991b; Schilling-Estes, 1999, 2002). Other views were also formed, such as Bell's (1984, 1991) model of *audience design* in which a speaker's style is seen as a response to an audience. Bell viewed style as a reflection of social variation, whereas Biber and Finegan (1994) viewed social variation as a reflection of style. This is not to mention *accommodation theory* (Giles, Coupland, & Coupland, 1991; Giles & Powesland, 1975) which draws on the speaker's orientation and attitude to the interlocutor and on the role of identity (Coupland, 1980) in determining speakers' style and their perception of style.

In recent formal models, stylistic variation is starting to be viewed as gradual, not abrupt (Boersma & Hayes, 2001). It involves optionality and learnability. In this sense, internal selection of one variant over another is related to the speaker's relationship with his/her social environment, the speaker's personality, and the social group that the speaker would like to associate and fit in with. This implies that internal change is affected by external or social factors. At the same time, internal change is constrained by the relationship of one variant with other variants with which it coexists.

2.3.3 The Cognitive-Sociolinguistic Strand

This thesis presents an analysis of variation of 12 lexical variables in the BSC which was carried out using methods of analysis that are fairly typical of variationist sociolinguistics and have been employed in a number of other studies in this field. Having presented an analysis of variation that is faithful to these established norms, the cognitive approach is concerned with expanding this analysis beyond that which has previously been considered mainstream in variationist sociolinguistics. This means, among other things, the study of mental representations of people when they choose words in verbal interaction is considered taking into consideration the knowledge, ideologies and other beliefs shared by social groups. For this reason, a focus will be led in Chapter Five on the value of the fundamental importance of the analysis of cognition (and not only that of society) in the analysis of lexical choice. Therefore, this section focuses on how language and, more specifically, word choice is a meaningful marker and mediator of natural social and personal processes.

Sociolinguistic Theory may be able to predict variation statistically, but it cannot account for the social meaning involved in variation. Because the linguistic structure that is abstracted is largely determined by a speaker's previous experience (Langacker, 1987, p. 380), and because no two speakers will have had exactly the same linguistic experiences, each speaker will abstract a different grammar. Linguistic variation between speakers is therefore inevitable and already presupposed by the theoretical framework (Geeraerts, 2003b, p. 1).

One cognitive ability enables the conception of a usage-based model of human language is the ability to form networks of knowledge in cognition and so those usage-based theories that have attempted explicitly to model the linguistic system have all employed some form of activation network. It must be borne in mind that language ultimately resides in patterns of neurological activity and so the network model that is proposed is dynamic. The abstract linguistic system is not generated by a series of rules or constraints which are static or fixed; the linguistic system is a dynamic event. It is constantly re-shaping as experiences change, not only during the critical language acquisition period but throughout a speaker's lifetime (albeit not to the same extent throughout the speaker's lifetime).

Frequency research has played a very large part in descriptions of usage-based models of language structure. Particularly important is the relationship between lexical frequency and the 'entrenchment' of the lexical item or linguistic unit. Langacker (1987, p. 59) explained that entrenchment is the result of frequency of successful use. The occurrence of any type of cognitive activity leaves behind a trace in cognition and the more that this type of activity recurs, the more entrenched the trace will become. As a particular node is activated in cognition, it becomes more entrenched which leads to the probability that it will be re-selected. Another major criterion of the usage-based framework is the need to include actual usage data in the construction of any theory in order that theories of language structure can

be grounded in real language use. Indeed in Chomsky's early work, the suggestion that actual usage data could be used to interpret linguistic structure was seen as absurd: "observed use of language . . . surely cannot constitute the actual subject matter of linguistics, if this is to be a serious discipline" (1965, p. 4). However, while speaker intuitions are doubtless an invaluable tool, any theoretical approach which proposes the existence of a relationship between language perception and production must also employ real language data as a source of evidence for understanding the structure of the linguistic system. It seems that the basic assumptions of the usage-based thesis are fundamentally compatible with a description of sociolinguistic variation. Dirven (2004) argued that usage-based cognitive linguistics "has a very natural basis for sharing common concerns with sociolinguistics" (p. 20). Despite this, "language variation is still widely absent from cognitive linguistic research, whereas in fact it ought to be at the heart of its research agenda" (Dirven, 2004, p. 21). This view is articulated more forcefully by Geeraerts (2001, p. 53):

> As has been explained many times…Cognitive Linguistics is a usage-based model: it takes actual language use as its starting-point, and investigates the cognitive reality behind those facts of use. But if the methodological movement of Cognitive Linguistics so to speak goes from parole to langue, it should be obvious that sociolinguistic variation in the broadest sense will have to be included in the investigation of actual use; it is impossible to take seriously the claim that Cognitive Linguistics is a usage-based approach and at the same to neglect the social aspects of language use.

As Dirven explains, even within the now growing trend of 'cognitive sociolinguistics', most of the research has been concerned with the merging of

linguistic theory and ideology (e.g. Geeraerts, 2003a) or with the link between language and culture in the development of cultural cognitive models (Morgan, 1997). There is, however, a small body of research that is beginning to address the place of sociolinguistic variation in cognitive and/or usage based models of language.

Prototypes are a fundamental principle of categorization in Cognitive Linguistics. A prototype is described by Taylor (1995, p. 59) as the abstract conceptual core of a category; it is an abstraction of the most common, most frequently encountered, most salient and most representative members of a category. Entities are assigned membership in a category by virtue of their similarity to the prototype – the closer an entity is to the prototype, the more central its status within the category. As an example, Hudson's (1997) model suggests that utterances in which t/d is present are 'typical' i.e. they are closer to the category prototype and instances in which t/d is absent are exceptions or category extensions. Hudson emphasized the 'usage-based' nature of the model, explaining that speakers abstract patterns of generalizations over variable instances of word final t/d. The main thrust of Hudson's argument is that in order to explain the statistical regularity of the variation found, it is necessary to propose the existence of a schematic hierarchy with different levels of abstraction. At the lowest level of abstraction, speakers will have stored a particular instance of a word. Hudson explained that speakers will recognize that some instances of words carry additional meaning that relates to plurality and so posits a corresponding level of abstraction in the hierarchy. Hudson therefore successfully applied actual

empirical data to support an existing Cognitive Linguistic theory, succeeding in the synthesis of variationist and usage-based linguistics. Although the categories proposed in Hudson's model may have been acquired by individual speakers from experience of language use (in other words, they are not considered to be innately inherited), the assumption remains that, during production and processing, the speaker begins by selecting the more abstract structure 'word' and, after a series of processes of inheritance in which certain linguistic structures feed others, eventually reaches the bottom level of the hierarchy: the realization.

Generally, the treatment of this synthesis has either been weak on empirical data or weak on the inclusion of the social motivations of language use. This is problematic because the use of socially motivated empirical research is particularly important in variationist sociolinguistics; as Cameron explained, for most sociolinguists, "quantitative sociolinguistics is sociolinguistics" (1997, p. 58). Regardless of whether we argue that this is an unreasonably narrow view, it remains the case that if usage-based sociolinguistics (or cognitive sociolinguistics) is to be taken seriously as a research method, and is to be beneficial to both theoretical linguists and sociolinguists, it must be capable of incorporating quantitative, socially motivated, variable data. This is the only way that this type of research will ever be considered a serious contribution to both sociolinguistics and (usage-based) linguistic theory.

2.4 Language and Speech Community

The concept of speech community has been central in the development of empirical linguistics and has often been used as a theoretical tool by several authors.

Historically Leonard Bloomfield (1926) is considered as the father of the concept of speech community from his concept of utterance as an act of speech and the assumption that utterances within communities are partly alike. Authors such as Labov (1972a), Gumperz (1982) and Duranti (1997) have expanded on this concept within the sociolinguistics field. If caution is exercised, the idea of a group of people sharing the way they speak can be useful even though these definitions may defer. When there is a strict normative position implying too much rigidity in a social structure, then looser definitions should be preferred. Romaine (1994) for instance has one such definition where a speech community is defined as a group of people not necessarily sharing the same language yet sharing a set of rules and norms for the use of language. Here speech communities have boundaries between them that are more social rather than linguistic. What this definition shows is that a speech community may be diverse socially and it is not mandatory that its members share a main language but communication with each is for special purposes (Tosca, 2002).

The concept of speech community therefore implies that the significance of local knowledge and communicative competence is bound in discursive activities in that members can easily identify outsiders from insiders, those living in borderlands and contact zone, and those passing as members. There have been suggestions that the main issue of modernity is no longer identity but citizenship. This is a statement of significance especially in the study of speech communities as it immediately puts into perspective the notion of standard language and as a proof of citizenship together with the ideological, social and political forces at work that cause

individuals to refuse or claim membership. The implication here is that the notion of the unconnected and isolated autonomous speech community will only be present within the confines of the most rigid linguistic science of the past. In future the linguistic science will be indebted to speakers whose existence will tie them to others in ways that will be validating their social lives at every turn. The concept of speech communities thus introduces both old and new political theories, arguments, and ideologies. This in turn introduces changes within the speech community as the implicit knowledge becomes involved in active discourse and the speech community and the subjects within it become changed by it (Duranti, 2008).

When sociolinguists decide to research on speech communities, they must comply with the general research techniques of carrying out a research project. Therefore a speech community is no different from any other sample population under study and hence must use all tools of research to elicit the right data from the participants for a successful research project. Correct use of data collection techniques and research methods will go a long way in minimizing problems and difficulties a researcher faces when undertaking a research project (for more information about approaching speech communities see Jaber & Krishnasamy, 2012a).

2.5 Arabic Language

Arabic is a Semitic language and the mother tongue of more than 200 million speakers. It is the second language of other 20 million people in the Muslim World. It is the official language of twenty one countries. Language usage in the Arab world

conforms to a pattern known as *diglossia*. This is a term first advanced by Ferguson (1959) and later refined and extended by Gumperz (1966). It refers to the existence within a single country of multiple languages, or of multiple dialects of the same language. The latter are often distinguished along the lines of high and low registers, employed respectively to express religion, education, and culture (on the high level), or everyday matters of the home and workplace (on the low level).

Classical Arabic, the language of the Holy Qur'an, is the basis for the higher form in the Arab countries and in fact, the Qur'an is the ultimate perspective authority in matters of language usage which is known chiefly to scholarly specialists. However, discourse across dialect boundaries is carried out in a modernized form of classical Arabic, referred to as Standard Arabic (SA). SA is the language of reading and writing; therefore, when children go to school to learn to read and write, they are taught from the very start in SA, a language none of them speaks (Trudgill, 2000, p. 96).

In the lowest level, there are the four main regional dialects, some of which are mutually unintelligible, and are roughly equal in distance from SA, including the Gulf, used in such easternmost countries as Iraq, Kuwait, and Saudi Arabia, Qatar, Bahrain, Oman, UAE, and Oman; Levantine in the area which includes Syria, Lebanon, Jordan, and Palestine; Egyptian, in Egypt; and Maghreb, found in wide use in the remaining countries along the northern rim of Africa (for more information

about Classical Arabic and its regional dialects see Abd-El-Jawad, 1987; Ibrahim, 1986; Mitchell, 1986).

The existence of a standardized form of Arabic allows speakers from drastically different regions to communicate intelligibly, even when their local dialects might not be understood by the other. Most Arabic speakers are able to seamlessly switch between their regional dialect and the SA of the educated classes. Lyons (1981) pointed out that the linguistic choice of a variety of those who are fully competent of the two varieties, is determined by a person's situation rather than by one's social class which is considered a reversal from the Western pattern. Trudgill (2000, p. 96) stated that if anyone does "attempt to use the high variety in everyday speech is generally felt to be artificial, pedantic, snobbish or reactionary". Then Trudgill assumed that there is 'Low Standard Arabic' when "there is often a mixture: mainly colloquial Arabic, but with an admixture of classical elements" in normal educated speech (p. 102).

Each dialect within these four main divisions is, in its turn, divided into many other local dialects and accents with clear differences between, for example, rural and urban, as well as, high and low status dialects. Hamed (1990, pp. 36-37) suggested that there are factors which changed the status of some Arabic dialects. These factors are political, religious, literary and the social status factors. In the Arab world, the existence of many dialects is due to the geographical and social factors, as well as language / dialect contact (Hamed, 1990, p. 45). He referred to the fact that

cultural and geographical changes affected the Arabic language. One of the most important effects was the shift of Arab life from rural (Bedouin) to the urban life style. Hamed (1990, p. 41) stated that the Arabs were affected psychologically, mentally and physically by their environment and thus their way of speaking was also affected.

2.6 Arabic Dialectology

Embedded in the modern linguistic tradition, sociolinguistics has concentrated on the spoken word. It thus stands in close relationship to dialectological traditions, though in contrast to dialectology, the main focus of variational sociolinguistics has been on urban areas. The concentration on the spoken word has had the effect of creating a distance from the traditional Arabic philology with its focus on the written text.

The study of variation and change in Arabic started with the examination of the difference between the urban and rural dialects; that is between city and Bedouin dialects. Thus Bedouin dialects were investigated by grammarians, such as Sibawayh and Al-Azhari as an attempt to pinpointing the differences between the two (Versteegh, 1997).

Ibn Khaldoun was one of the well-known Arabic grammarians who concentrated on the differences between urban and Bedouin dialects. The pronunciation of the

Classical Arabic phoneme (q) by Bedouins is highlighted by Ibn Khaldoun who stated that:

> One of the phenomena that happens in the speech of these Arab [Bedouins] till this day is their special way of pronouncing (q). They do not pronounce it at the place of articulation of the urban people, as it is mentioned in the books of Arabic, namely between the back of the tongue and the opposite point of the upper palate. They do not pronounce it at the place of articulation of the (k) either, which is somewhat lower than the place of (q) on the tongue and the upper palate, but they pronounce it at a place that is somewhat in the middle between (q) and (k). (cited in Versteegh, 1997, p. 131).

Studies on Arabic language in general and Arabic dialects in particular started in the early 20th century by Arab and non-Arab scholars such as Ferguson (1959), Blank (1960), Badawi (1973), El-Hassan (1977) and many others. These studies were mainly interested in leveling the standard and the vernaculars (Arabic dialects). However, these studies were descriptive in nature and attempted to generalize findings of a particular Arabic Speech community to all Arab communities.

As new Arabic dialects started to emerge due to the fact that Arabic language was changing, some grammarians believed that the language of the Holy Qur'an was being damaged with the fear it would be misinterpreted (Versteegh, 1997, p. 102). Ibn Khaldoun expressed this issue by stating that:

> When Islam came and they [Arabs] left Hijaz….. And started to mingle with non-Arabs, their [linguistic] habits began to change as the result of the different ways of speaking they heard from those who tried to learn Arabic, for hearing is the source of linguistic habits. As a result of this influence, Arabic became corrupt….Their scholars began to fear lest the [linguistic] habit became completely corrupted, and lest people grow

> used to it, so that the Qur'an and the tradition would became incomprehensible. Consequently, they deduced laws from their [the Arabs'] ways of speaking that were universally valid for this habit… and that could be used as a canon for the rest of their speech (cited in Versteegh, 1997, p. 102).

Research has gradually moved from describing and concentrating on Classical Arabic to looking at vernacular variation for different reasons. Starting with Ibrahim (1986, p. 515) who emphasized the point that "it is no use to go on pretending that Standard Arabic is our native language when it is not". The second reason was about realizing dialectal differences. As dialectal difference are spread through the Arab countries, the urban dialect in Jordan is different from that in Iraq, and Iraq's urban dialect is different from its rural one (Abd-el-Jawad, 1981; Al-Wer 1997, 2007). Realizing this fact, many Arab linguists studied the variation found in Arabic dialects extensively such as the studies of Ibn-Jinni (1952), Anees (1965) and El-Gindi (1983) amongst other Arab researchers.

In the mid 1980s, Arab sociolinguists started to realize that linguistic variation did not occur mainly as a result of the impact of the standard on the Arabic dialects as Bassiouney (2009, p. 18) assumed. The notion that the standard is equal to the prestigious is not applicable in the Arab situation as long as certain dialects seem to hold a prestigious place due to different factors such as the geographical, political and the social factors which are unique to each Arab country in the Arab World (Bassiouney, 2009). It is at this point that the Arabic sociolinguistics started to appear.

2.7 Arabic Sociolinguistics

In the mid 1980s, Arab sociolinguists started to realize that linguistic variation did not occur mainly as a result of the impact of the standard on the Arabic dialects (Bassiouney, 2009). The notion that the standard is equal to the prestigious is not applicable in the Arab situation as long as certain dialects seem to hold a prestigious place due to different factors such as the geographical, political and the social factors which are unique to each Arab country (Bassiouney, 2009).

In Western research, it has been established that standard variants are the prestigious forms of language and thus considered the target of hypercorrection (Deuchar, 1988). On the contrary, the situation in the Arabic sociolinguistics has taken another direction when a non-standard variety in an Arab society is considered the prestigious dialect while a standard variety is stigmatized. This is because Arab scholars relied on Western methodologies and theories. Owens (2001) explained that "it need not automatically be assumed that Western theories will not be applicable in the Arabic world" since a ‘prestigious dialect’ is not necessarily the ‘standard’ in the general Western language pattern. It is at this point that the Arabic sociolinguistics started to appear.

The use of linguistic corpora brought Arabic sociolinguistic into the domain of quantitatively-based sociolinguistics when there were attempts to explain that part of variation which is not explicable linguistically via statistically significant correlations with various extra-linguistic categories. In the different studies which

have been carried out within this framework different points of emphasis have emerged inspired by empirical tendencies deriving from data.

The following sub-sections will summarize the main parameters that have been shown to correlate with variation in different Arabic-speaking communities but always in comparison with Western studies.

2.7.1 Gender Effects

Gender, together with social class and age, is one of the most widely used social demographic categories, so categorizing individuals into 'females' and 'males' has long been standard practice in social sciences. It is far more frequent to find gender-preferential variation, where women in a community, say, use one variant more frequently than men. For example, a large number of sociolinguistic surveys carried out in the English-speaking world have shown that for the [ing] variable, in word such as *running,* men use a higher proportion of the alveolar /n/ variant than women in their social class and, conversely, women use a higher proportion of the velar plosive (Cofer, 1972 in Philadelphia; Labov, 1966 in New York City; Trudgill, 1974 in Norwich ; Wolfram, 1969 in Detroit).

It is usual for researchers to see one of the variants as 'standard' or overtly prestigious, usually on the grounds that this variant is used with an increased frequency in more formal speech styles. Within this perspective, Labov (1998) found out that in stable sociolinguistic stratification, men use a higher frequency of nonstandard forms than women; that in change from above (careful speech), women

favor the incoming prestige forms more than men; that in change from below (casual speech), women are most often the innovators. Indeed, the finding that women tend to use a higher proportion of standard variants than men in the same social class has been of very wide general interest. Fasold (1990, p. 92), for example, referred to this as "the sociolinguistic gender pattern".

Fasold (1990) suggested that women use a higher proportion of standard variants than men because this allows them to sound less local and to have a voice, therefore, to protest against the traditional norms that place them in an inferior social position to men. Gordon (1997) presented experimental evidence for a symbolic association between local accent, nonstandard syntax and promiscuity, arguing that middle class women may avoid using nonstandard forms in order to avoid being associated with this social stereotype. Deuchar (1988) developed an interpretation based on politeness theory, in which women's higher use of standard forms can be seen as a strategy for maintaining face in interaction where women are powerless. Trudgill (1972) argued that women have to acquire social status vicariously, whereas men can acquire it through their occupational status and earning power. Women are more likely, therefore, to secure and signal their social status through their use of the standard, overtly prestigious variants. The higher proportion of nonstandard variants used by men can then be explained as an orientation not to the overt norms of the community but to the covert prestige of working class forms, which symbolize the roughness and toughness that is associated both with working class life and with masculinity. Eckert (1989) assumed that the fact that women appear to be

universally granted less power than men will certainly not cause all women and men to act alike, given all the other factors that are involved .

The empirical basis of the generalization presented in Labov's assumption that men use a higher proportion of nonstandard forms than women can also be challenged. The concepts of *standard* and *nonstandard* tend to be taken for granted in social dialectology , with standard forms corresponding to those used with the greatest frequency by the highest social class in the hierarchy and, as mentioned earlier, used more frequently by all speakers in their more formal speech styles . These standard forms are taken as synonymous with the overtly prestigious forms of the speech community. Since all members of the speech community are assumed to share a common set of norms and values, they are also assumed to agree on the social evaluation of the standard, or prestige, variants and the related notion of prestige is not uniform in all communities (Milroy, 1980).

Labov insisted that the empirical evidence from the Philadelphia survey shows that as a rule women are the active agents and lower-class women in particular. He concludes that "the interaction of sex and social class leave us no choice but to focus on women's behavior, and to assess its effect on linguistic change" (1980, p. 40). This marks a change from the focus in early work in social dialectology, where social class was seen as the primary variable, and gender was treated very much as a secondary one. Class was still a determining factor, but women from the working

classes and the middle classes behaved more similarly to each other than to men from the same social class as themselves (see also Horvath, 1985).

However, there are case studies which showed that men appear to favor the prestige forms. In Amman, for example, men prefer to use the standard [q] variant. In addition, in Bakir's (1986) study in Basra, Iraq regarding females and males' use of the [q] variant, he found that although women used less standard variants, they associated themselves more with the prestigious Arabic dialect spoken in Iraq which is Baghdadi Dialect. He explained the point that "in the formal domain of women, the prestigious linguistic form would certainly not be a form that is associated with formality, i.e., Standard Arabic. It is the variety of Colloquial Iraqi Arabic used in Baghdad" (p.7). This general reversal of thought from the Western gender pattern made Ibrahim (1986, p. 116) to conclude:

> Unlike women in the rest of the world, Arabic- speaking females tend to approximate Standard Arabic to a lesser degree than Arabic-speaking males. This conclusion is problematic because it is predicted on the false assumption that standard and prestigious Arabic are one and the same variety.

Labov (1998, p. 13) pointed out that "this appeared to represent a global reversal of the positions of men and women in two Muslim societies, perhaps related to the fact that in general women played less of a role in public life of those societies". However, this is not necessarily being true since Standard Arabic is not comparable with the Standard dialects of other societies as Chambers (2003) claimed. Chambers

pointed out that "it [Standard Arabic] cannot fill the role of the standard variety in social stratification" (p. 160).

Gender and linguistic variation therefore have been studied in Arabic sociolinguistics (Al-Wer, 1991; Haeri, 1991; Taqi, 2010 among others). Al-Wer (2005, p. 631) stated that *gender* is the most sophisticated social variable in sociolinguistic studies. The view of *prestige*, as will be explained later in this section, is not only based on standard and vernacular use, but also on the localization of the features used.

The view of gender and linguistic variation differs in western and Arabic communities. Prestige and standard concepts are usually interchangeable in Western societies. In the Arab world, the traditional view of women's use of language and the notion of prestige is given different explanations. For example, Kojak (1983, p. 39) thought that "men approach the more prestigious classical variety of Arabic....where women are highly segregated and excluded from public life".

The social pressure in the Arab world is a motivation for men and women to shift towards their locally prestigious dialect which is not necessarily the standard variety. Ibrahim (1986, p. 125) explained:

> There is no question that H [Standard Arabic] has a certain degree of prestige and its religious, ideological, and educational values are undeniable, but its social evaluative connotations are much weaker than those of locally prestigious varieties of L [vernaculars]. It is these varieties of L, not H, which carry most of the important connotations that matter to

> most individuals in life such as socioeconomic class, urban vs. rural origin or affiliation, and socio-mobility and aspiration.

Abd-El-Jawad (1987) provided further evidence to support Ibrahim's point of view while revisited the local prestigious varieties in West Bank, Iraq and Bahrain in the studies of Blanc (1964) and Al-Ani (1978) on Baghdadi Arabic, Holes' study (1983) on Bahraini Arabic and Annuri's (1982) investigation in Nablus. Abd-El-Jawad's analysis of the collected data from these studies was that the local varieties in these three Arab communities are of better status than the standard variety. He found that women and younger men preferred the local prestige variety to the standard variety. Abd-El-Jawad (1987, p. 256) stated that:

> In each of the three reported cases, the varieties of these dominant groups are acquiring a local prestige which competes with the prestige of MSA (Modern Standard Arabic) in informal settings. The prestige is of course not inherent in the linguistic features themselves, but it is largely derived from the status of the social group using this variety.

Indeed, this derives us to the conclusion that in each Arabic-speaking country, there is a local variety which is non-standard, nevertheless, prestigious. Of course, this variety is not taught at school and not found in literary writings, but is maintained from the status of the dominant group. One could conclude that it is the dialect of the dominating group which is normally considered the most socially prestigious variety.

Despite the fact that the Arab dialects assume prestige more than the standard variety, Abu-Haider in her investigation of Baghdadi Arabic (1989, p. 471) reached

an opposite conclusion. She selected 50 Baghdadi men and women (25 of each) ranging from 26 to 41 year of age and interviewed them. She found that "the prestigious variety of spoken Arabic is in the direction of the standard, and that woman, more than men, tend to favor this variety". In the same vein, Daher (1998) investigated Damascus Arabic and found that when recorded interviews with 46 Damascenes that "the standard and the vernacular functions as two sets of norms: men and women recognize the same standard but in terms of actual speech behavior, they approach different norms" and thus stating that the prestige of a dialect differs by gender.

Al-Khatib (1988) gave reasons for women's sensitivity towards language and prestige claiming that it is the religious restrictions, social segregation and awareness of the local prestigious variety that motivate most women to resort to the prestigious variety and pay attention to their speech. In the Arab world, it is expected from women to speak calmly and respectfully. Trudgill (1996, p. 401) referred to the sensitivity of women to "secure and signal their status linguistically and in other ways". Adding to this, Suleiman (1985, p. 45) believed that the social status of most Arab women is associated with their manner of speech, that is why "more 'correct' social behavior is expected". He added that women are also "inherently more sensitive to social prestige and social class division than men".

As shown above, one of the most important findings in the studies of gender and linguistic variation in the Arab world shows that women on average use the

prestigious variants, whether standard or vernacular, more than men. Al-Wer (2005, p. 361) added that "this generalization is only valid so long as we bear in mind that is based on statistics arrived at through average data". Indeed, this statement means that as long as the role of each gender changes constantly alongside social contact and status; therefore, the only generalization should be derived from statistics.

Modern Arabic sociolinguistics have shown that gender preferences for particular linguistic forms are not a matter of standard vs. vernacular, but rather an issue of 'localize and supralocal feature' (Al-Wer, 2005, p. 361). By localized features it is meant those that are specific to a particular dialect or a geographical region, whereas supralocal features are part of a wider geographical area, and thus they are not limited to a particular dialect or region. It is clear that the use of specific linguistic features, by Arab women, that do not agree with the standard does not contradict the fact that females also use prestigious forms, since the prestigious is not always the standard.

On the other hand, in both Arab and Western communities, they are men who tend to use localized features. It has been shown in Al-Wer's study of the [θ] variant that male speakers often use the traditional [θ] variant, whereas females use the more innovative [t] which is spread more widely across the metropolitan and is thus considered supralocal. Al-Wer (1999, p. 41) found that local Jordanian females used the urban prestigious forms more than men due to the belief that they reflect 'finesse'. Adding to this, men tended to use the tougher forms in Haeri's study

(1997) of Cairene men and women. She found that male speakers preferred to show heavier pharyngealization than female speakers in order to reflect toughness and masculinity.

Therefore, formulating generalizations that incorporate the results of an increasing number of empirical investigations is a mark of this discipline. Indeed, it is time to go still further, producing hypotheses that can be put to the test in future studies. The central place given to gender differentiation in these generalizations shows the importance that this social variable has assumed in our attempts to understand the social mechanism of linguistic change. Eckert (1989) made this point strongly, arguing that generalizations about the relation between sound change and gender are best deferred until more communities have been examined in a way that takes account of the socio-cultural contexts in which women and men live. Holmes (1998, p. 106), however, took a more moderate view. He argued that the fact that there are limits on the applicability of generalizations should not blind us to their immense value. He pointed out that "we should be concerned with refining generalizations, rigorously confining the area to which they apply, but we should not regard them as useless when exceptions are identified".

2.7.2 Age Effects

The age of the speaker is seen as a significant social variable affecting sociolinguistic variation. Indeed, we can note that variables not involved in change do not demonstrate an even distribution across age – groups. Many researchers

emphasize the role of social factors in affecting a change (e.g., Eckert, 1991a; Haeri, 1997; Labov, 1963, 1966, 1972a, 2001; Milroy, 1980; Trudgill, 1974) For example, Labov (2001, p. 498) emphasized that social factors are "the forces that move and motivate change, and are responsible for incrementation and transmission across generations".

In Labov's study of Martha's Vineyard (1963), the fishermen, for example, showed strong defiance to forms from the mainland of New England; they clung to the island's old ways of pronouncing (ay) and (aw). That is, they maintained the island's centralized features. The younger age group also showed more centralization than most age groups to show strong identification with the island and to distinguish themselves from the summer tourists who come from the mainland.

Eckert (2003) believed that gender linguistic variation should be investigated in relation to the age of the speaker. On the same ground, Bassiouney (2009, p. 113) noted that the concept of the prestige differs not only by gender, but also by age. Thus she stated that the older women are likely to use the varieties associated with older prestigious forms since they have limited access to modern prestigious varieties. However, in her study of Baghdadi dialect, Abu-Haider (1989) found that old and young women were more sensitive to the prestigious forms than old and young men.

The investigation of linguistic change in almost all sociolinguistic research is based on what is called *apparent time methodology*. According to this approach, the speech of older informants is compared with that of younger informants. Differences in speech between these two groups are interpreted as representing linguistic change. It is assumed that younger speakers tend to favor newer forms and older speakers tend to be conservatives adopting older forms.

On the other hand, the 'real time' methodology suggests studying data in real time without comparing the speech of different generations of speakers in any speech community then investigates change of variables after twenty years or hundred or even more. Many researchers have found that the real time approach is time consuming, so they resort to Labov's methodology (1966, 1972b) so that they can study the results immediately. Even though, in the apparent time approach some differences may be due to age – grading. That is, the differences between younger and older speakers are repeated in every generation. Trudgill (2002, p. 49) added that there are still "some obvious pitfalls, one of which is that one cannot predict with absolute certainty which of a number of apparent ongoing changes are going to continue to be successful and which not". Despite those pitfalls, linguists continue to adopt apparent time approach to investigate change in any particular society. In addition, no other approach, used and then developed by others, has been maintained so far.

One further point to be mentioned is that the only safeguard available to Western researchers involves comparison with older records, such as that of traditional dialectologists' records in Western societies. In his Martha's Vineyard study, for example, Labov (1966) compared his findings with data collected for the Linguistic Atlas of New England in 1933. However, in many other societies, such as Arab countries, no such records are available to be taken into consideration. This, of course, adds too much responsibility on the researcher, again, to depend on good data for further analysis and interpretation.

Chambers and Trudgill (1998) found that the normal pattern of age differentiation exists when the youngest and oldest people tend quite clearly to choose the vernacular forms. This is so because these two age groups seem to respond more to peer group pressure. And hence, non – prestige variants appear to be attributed to the notions of solidarity and toughness. By contrast, the middle – aged speakers have the tendency to associate themselves more with the standard variants so that they aim to accomplish social values. Accordingly, they attempt to identify themselves with a particular social network. A different pattern of age differentiation is found when a linguistic change is taking place. The variable [e] is such an example. The study of Norwich English (Chambers & Trudgill, 1998) highlighted that the speakers, those under thirty, are the innovators. In the same study, there were some linguistic variables that are no longer used. One such example is the Norwich variable [ir] which was found in the speech of the old only.

The obvious problem is that age is a continuous variable so that for purposes of correlation with linguistic features, speakers must be classified in age groups which require a decision about how such age groups are to be identified. Indeed, there is no general agreement on how to treat age as a variable and what constitutes an appropriate age group in a sociolinguistic study. Some studies concentrate on a single age group such as the study of Wolfram (1973), Eckert (2000) and others. In Milroy's Belfast sample of speakers, she recorded no speakers between the ages of 25 and 40 since she divided her sample into two age groups: 18-25 and 40-55. Trudgill (1974) divided his speakers' age into decades. Dubois and Horvath (1998) identify three age groups in their Cajun sample (19-39; 40-59; 60 and over).

Sociolinguistic literature includes studies that have various categorizations of age group; hence what is of so much importance here is the conclusion that age group divisions should be clearly justified. Milroy and Gordon (2003, p. 39) summed up their discussion of age that "age by itself has no explanatory value; it is only when examined in the context of its social significance as something reflecting difference in life experiences that it becomes a useful analytical construct".

Although age differences are not emphasized in studies conducted in the Arab world and no explanations have been given so far, there appears to be generally age differences in the speech of old and young informants from both genders in the Arab area as differences have shown to exist in many other parts of the world. Haeri’s (1991, 1997) findings which were based on an experiment that was performed on

twenty-seven children, ages five to twelve. Although the experiment was done on Cairene children, it shows that it is very difficult to elicit words containing [q] from children. Haeri concludes that the reappearance of [q] in Cairene colloquial speech is the result of lexical borrowings from SA, and that children acquire [q] later on in life through formal education.

2.8 Summary

It has been the researcher's concern to show that it is difficult to incorporate into generative theories of linguistic structure which were not initially designed to model sociolinguistic variation and efforts to do so have retained the competence/performance divide. In usage-based theories of language, no such divide exists and so the cross-over is implied in the theoretical framework. However, it is still largely unexplored and in the emerging cases in which it has been investigated, the emphasis has often been on the capability of the theoretical model to handle variation rather than with an attempt to apply the model to socially motivated linguistic data.

Also, this chapter used insights from modern sociolinguistics in Western and Arabic studies to explore the background behind the emergence and identification of the various correlations made in linguistic research. A brief description was made to the emergence of Arabic dialects and the factors that stand behind different regional Arabic dialects. This, certainly, led to the discussion of the notion of prestige in the Arab world generally, and two areas in Iraq specifically, and to the account of how certain Arabic dialects have assumed prestige according to social, political and

economic factors. A special emphasis in this chapter focused upon the role of social factors in identifying variation and change.

CHAPTER THREE
METHODOLOGY

3.1 Introduction

An introduction to the quantitative approach will be presented in detail. It is within the pioneering work of William Labov the linguistic variation in any speech community is shown not as chaotic but as socially regular. Reference is frequently made to Labov's studies throughout this chapter. The strong influence of his methodology upon the structure and contents of sociolinguistics can easily be recognized.

The choice of the independent social variables and the interpretation of the twelve dependent linguistic variables assumed to correlate with the social ones will be explained. In addition, this chapter provides a presentation of sampling procedures and data collection techniques employed in the analyzing of social variation and language change. The appropriate choice of informants as well as the ways in which data collected, coded and analyzed shape the findings reached in this study.

In Baghdad, field methods constitute a fundamental and time consuming step in the research process. Indeed, the choice of the speakers and the ways through which data obtained depend largely on the objectives and the theories upon which this study is based. Undoubtedly, this research in terms of reliability and replicability depends on careful planning of field methods.

3.2 Research Frameworks

Based on the problem statement, the theoretical framework explains the association between the linguistic and the social factors of sociolinguistic variation and to consider Arabic sociolinguistics within this approach. Then, it identifies the approach that has attempted to incorporate sociolinguistic accounts of variation and change into generative theoretical frameworks and to place the researcher's concerns among wider theoretical issues.

The conceptual framework explores relationship among variables. It shows the relationship between variables in sociolinguistic variation on one hand and incorporates this relationship with the speaker's mental realization and group solidarity in a social setting on the other hand. The following will be described sequentially.

3.2.1 Theoretical Framework

The theoretical framework first explains the concept of variability in the sociolinguistic theory pioneered by Labov (1966). The correlation between social and linguistic variables which leads to variation and change has shown systematic variability in Western Academia. However, the diaglossic situation of Arabic revealed unsystematic variation in Arabic sociolinguistics. Then, the researcher's concern is to explore the extent to which the cognitive sociolinguistic approach has incorporated sociolinguistic variation in accounts of language structure by incorporating the mental processes of a speaker in social setting to determine

linguistic choice. Therefore, choice is a meaningful marker and mediator of social and personal processes. This approach is used to account for the social meanings involved in the patterns of variation that constitute change in the BSC. The theoretical framework of this study is shown in Figure 3.1 below:

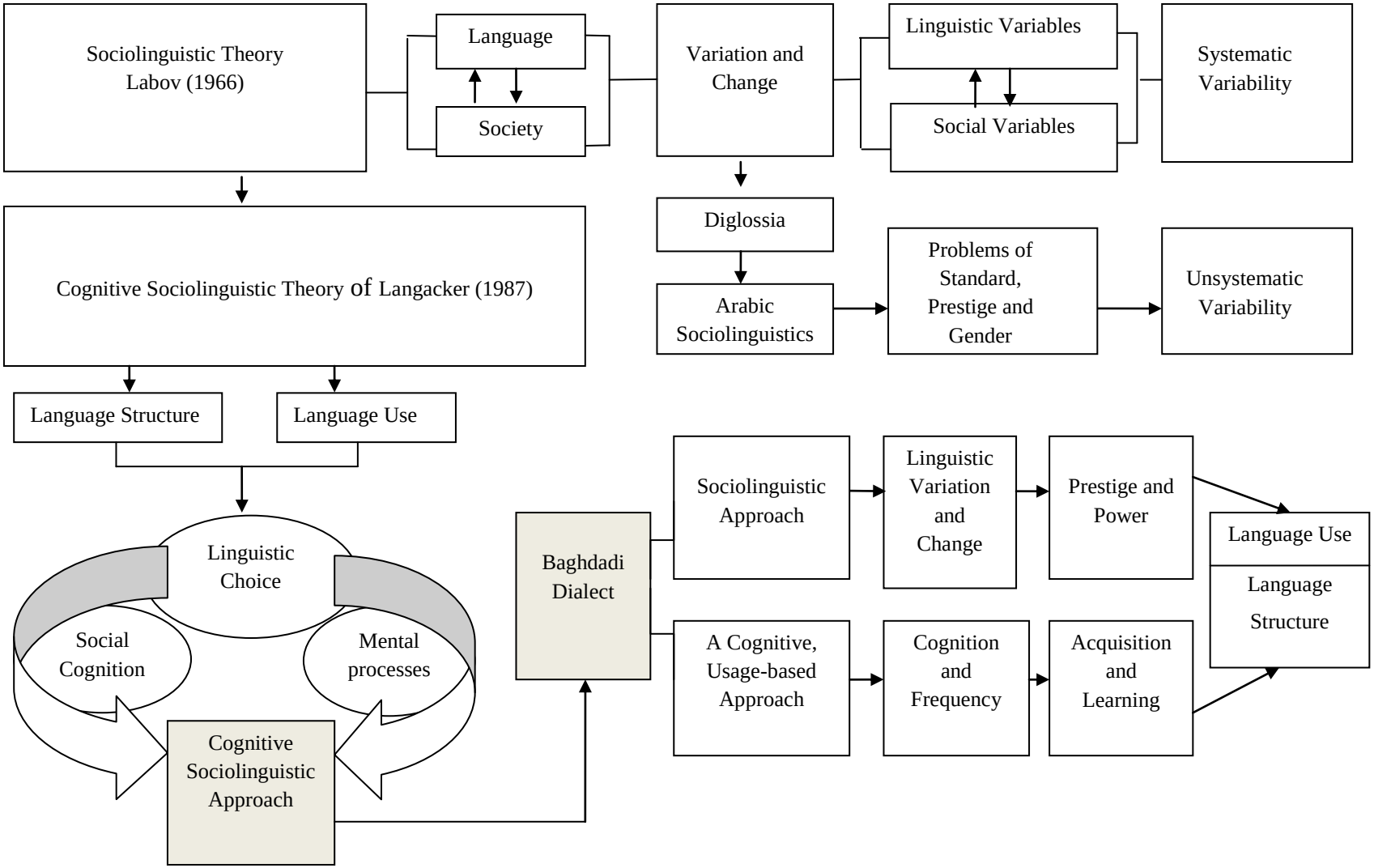

Figure 3. 1 The Theoretical Framework

3.2.2 Conceptual Framework

Based on the cognitive and sociolinguistic approaches used in this study, the researcher will measure the effects of two social factors, mainly gender and age with the choice of 12 lexical variables in the BSC. To achieve the above general aim, this study uses the core theory of sociolinguistic variation and change pioneered by Labov (1966) to account for patterns of variation and change in the Baghdadi Dialect (BD). First, the researcher will measure the effects of social variables on lexical choice using methods of analysis that are fairly typical of variationist sociolinguistics. This will be carried out by implementing correlation and regression tools so that the strength and direction of effects between the linguistic and the social variables will be determined. Second, the researcher will identify patterns of variation between the choices made by males and females using T-test analysis. Third, the researcher will identify patterns of change among older, middle-aged and younger speakers by applying multiple comparisons using Post hoc tests.

In addition, to account for the relationship between the speaker, society and linguistic choice, the researcher will use different assumptions of Cognitive Theory. First, to consider mental representations of speakers while choosing words in verbal interaction, the researcher will incorporate the cognitive approach to sociolinguistics taking into consideration the knowledge, ideologies and other beliefs shared by social groups. Second, to account for lexical change, the researcher will use the usage-based approach of grammar theorized by Langacker (1987) and maintained

and developed by Pierrehumbert (2001) which leads to acquisition and learning processes. The conceptual framework for this study is shown in Figure 3.2 below:

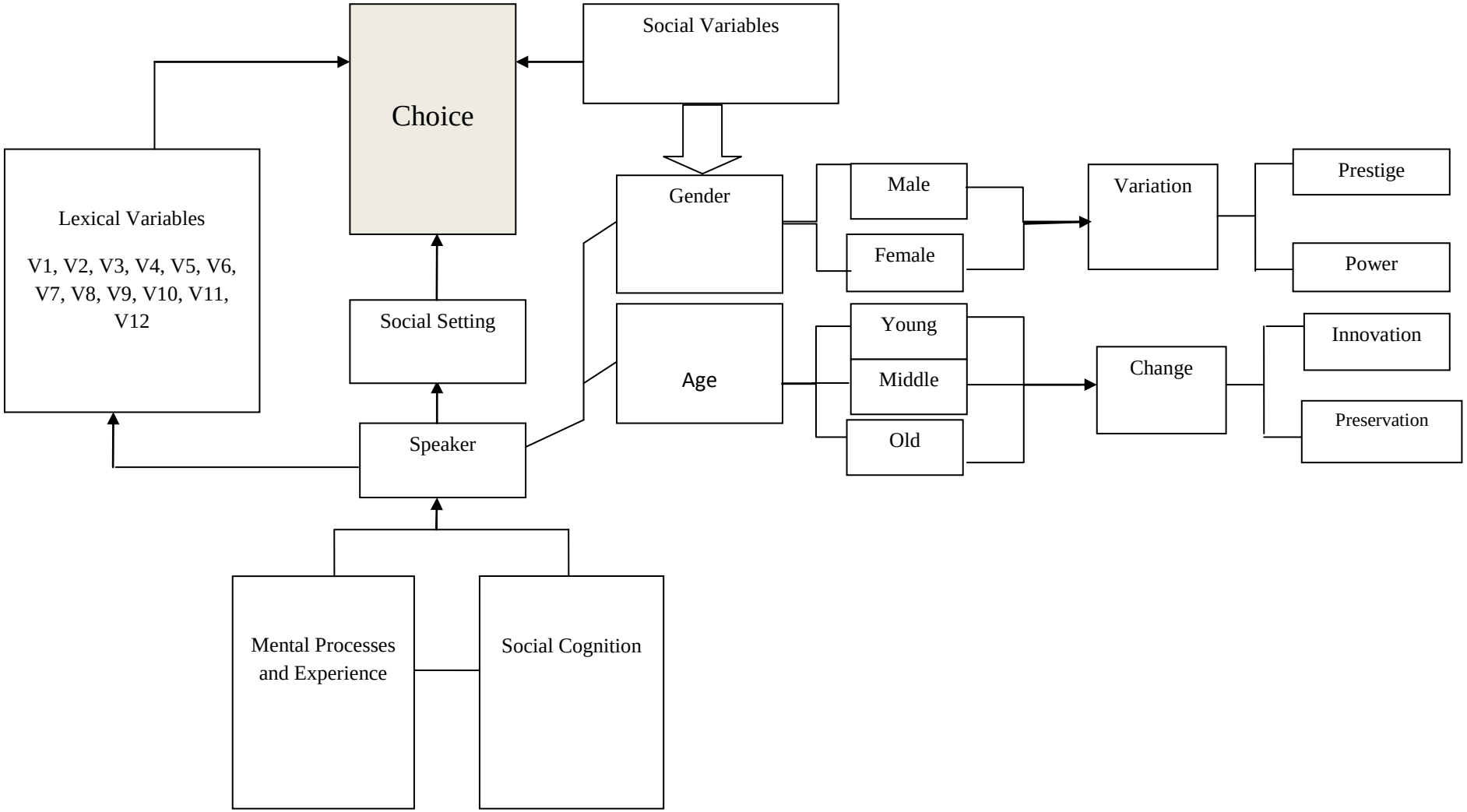

Figure 3. 2 The Conceptual Framework

3.3 Why Quantitative Paradigm

Quantitative methods enable the researcher to collect data that can be quantified and statistically analyzed. On the other hand, qualitative methods enable the researcher to gather descriptive and experiential interpretations of a phenomenon. There is however general agreement in the field of sociolinguistics and some other fields, such as psycholinguistics and stylistics that there is room for both and reason for both. Campbell (2003, p. 52), for example, argued that "each methodology has a place, and that none should claim to be 'better' than all the rest."

Quantitative research looks at the general case then moves toward the specific and provides a means to get order out of unorganized, separate bits of information that come from the real world (Leedy & Ormrod, 2001). Thus the statistical method is a means whereby insight into the data is sought by (1) identifying a problem that defines the goal of one's quest; (2) positing a hypothesis that, if confirmed, resolves the problem; (3) gathering data relevant to the hypothesis; and (4) analyzing and interpreting the data to see whether they support the hypothesis and resolve the question that initiated the research (Leedy & Ormrod, 2001). This deductive approach to research considers a potential cause of a variable and hopes to verify its effect; therefore, cause and effect is unquestionably about the strength of the relationship (Creswell, 2009). Campbell (2003, p. 52) added that "the most obvious and basic premise [of quantitative approach] is that the question being asked determines the most appropriate research strategy".

Since the purpose of this study is to measure the effects of gender and age on lexical choice through statistical analysis and verification and not to generate meaning through experiences or social behavior, the quantitative method was chosen. The intent is to establish, confirm or validate relationships among variables and to develop generalizations that contribute to the theory of sociolinguistics. Based on the research objectives, questions and hypotheses, the qualitative method is not designed to address inquiries that required quantification and statistical treatment. Conversely, a mixed methodology would also be unnecessary because of the sufficient nature of the quantitative approach to address the research questions.

Creswell (2003, p. 18) stated that quantitative research "collect data on predetermined instruments that yield statistical data". Creswell (2003) added that the methodology of a quantitative research maintains the assumption of an empiricist paradigm. The research itself is independent of the researcher. As a result, data is used to objectively measure reality. That's why quantitative research creates meaning through objectivity uncovered in the collected data and can be used in response to relational questions of variables within the research.

Variationist sociolinguistics was one of the first branches of linguistics to adopt a quantitative approach to data analysis (e.g., Fischer, 1958; Labov, 1963, 1966, 1969; Wolfram, 1969) Much of the sociolinguistic research depends on the 'variationist paradigm', which is based on the research methods and analytic techniques developed by Labov (1966, 1972a). The variationist paradigm is empirical in its

methods, in that it depends on collecting natural speech from speakers. Its main focus is on understanding variation and change in the structural parts of language rather than on the behavior of the speakers or the nature of speakers' interaction (Milroy & Milroy, 1992). This type of social variation was the first to be studied 'quantitatively'; that is by counting variants and comparing the incidence of variants in different speakers and group of speakers.

The basic goal of variationist research is to identify the social factors that influence the choice between the variants of linguistic variables. For example, Labov (1966) found that the likelihood of pronouncing /r/ following vowels was directly related to the socioeconomic status of speakers in New York City. Labov also found that the pronunciation of /r/ was related to age, with younger speakers being more likely to pronounce /r/ than older speakers in the upper middle class, but with older speakers being more likely to pronounce /r/ than younger speakers in the lower middle class. Labov argued that the pronunciation of /r/ was most common in the language of the younger upper middle class because this pronunciation was in the process of becoming the more prestigious form, but that this pattern was reversed in the speech of the lower middle class because older speakers were more likely to be aware of the prestige associated with the pronunciation of /r/ than younger speakers, and were thus more likely to adopt the innovation, revealing their social aspirations.

While early variationist studies focused on simple relationships between the value of a linguistic variable and the value of a social variable, over time more advanced

methods for the analysis of linguistic variation were developed. Since the 1970s (e.g. Cedergren & Sankoff, 1974; Sankoff & Labov, 1979), the most common statistical method in sociolinguistic research has been regression models which are used to test if the alternation between the variants of a linguistic variable is predicted by various aspects of the social background of a speaker.

In most sociolinguistic studies, a small number of linguistic features are chosen and investigated for their extreme value in representing a full image of a speech variety in a particular speech community. For example, many of Arabic studies focused on the study of the (q) variable for its linguistic value in representing gender differentiation in many Arabic spoken dialects (e.g. Abu-Haidar, 1989 in Baghdad; Habib, 2008 in Syria; Taqi, 2010 in Kuwait among others).

Indeed, there is extensive research written on the value of variability starting from Edward Sapir (1921, p. 147) who remarked that "everyone knows that language is variable" to James Milroy (1992, p. 2) who claimed that "language is variable and in a state of change" and hopefully not ending with Dominic Watt (2007, p. 5) who referred to the fact that "knowing that there are different ways of expressing the same idea in a given language is a fundamental element of people's everyday linguistic awareness".

Labov (1966) introduced the concept of linguistic variable to prove that variation is not free at all, as traditionally assumed, but conditioned by social context. Labov

(2001, p. 38) commented that "the first contribution of sociolinguistic research in the second half of the 20th century was to show that variation was not chaotic, but well-formed and rule-governed, that it was indeed an aspect of linguistic structure".

Labov (1966) explained that speakers vary in their choice of one variant rather than another. Furthermore, one speaker may use variants differently according to the different situations in which the speaker finds himself/herself. The meaning of linguistic variable therefore remains constant but the form varies; that is, these forms do not encode different meanings. Definitely, these variants correlate with other items in the structure of language and / or with other social variables. In this case, such a variable is termed as 'sociolinguistic variable' (Downes, 1984 p. 75). This variable is a basic tool which can be used to explain patterns of variation and to give average index scores for groups within the sample. Labov (1966) found that any change in the social variable was accompanied by a change in the linguistic variable in a systematic way.

3.4 Social Variables

It has been proven in academic research that linguistic variables co-vary with social variables and represent systematic patterns of variation and change. The choice of social variables in the present research is not haphazard and is supposed to verify linguistic variation and change as far as lexical choice is concerned. This study is based on social factors that have been often investigated and stressed as essential factors in language variation and change. Among these factors are age and gender (e.g. Eckert, 1989; Eckert, 1991a; Labov, 1966, 1972a, 2001; Milroy, 1980 among

others). The decision to choose certain variables such as *gender* and *age* and exclude other variables such as *social class* and *literacy* is justifiable.

In what follows, there is an explanation of the two social variables chosen in this research.

3.4.1 Gender

Romaine (1994, p. 101) emphasized the importance of considering "the sociocultural dimensions of the division of humans into male and female person (i.e. gender), rather than its biological determinations (i.e. sex)" as they may demonstrate evidence of language variation. Since gender is a main social variable in this study, it is important to explore the status of women and the language variants used by them to provide a better understanding of gender differences.

Slightly more than 49% of the population was female (Central Organization of Statistics and Information Technology, 2010). In the past, peripheral roles attributed to females since Iraq was a gender-based society. It is the concept of patriarchy which refers to the empowerment of males over females in the social organization of everyday life. Authority within the family is determined by seniority and gender. The father, in theory, has absolute authority over the activities of the members of the household. This pattern has been greatly weakened by the urban environment and by the shift of more and more responsibilities from the family to larger social institutions, such as schools and universities. An even greater change in the traditional pattern of male dominance has been brought about by Iran-Iraq War in

1980. To field a sufficient force it has had to draw down the available labor pool on the home-front, and to compensate has mobilized women. In the mid 1980s, the overwhelming proportion of employees in many ministers was women (Al-Jawaheri, 2008; Ismael & Ismael, 2000; Khayyat, 1990).

Recent studies on gender roles such as that of Abu-Haidar's study (1989) on Baghdadi Arabic and Bakir's (1986) investigation of the spoken Arabic of Basra concluded that roles in Iraqi society are not clear-cut and both genders enjoy similar social privileges. Therefore, it is women who are more prestige conscious and the direction of that prestige is towards the Standard Arabic forms in Baghdad and towards the prestige variety of the dominating group; that is Baghdadi dialect in Basra respectively. Nevertheless, in the past, when Baghdadi women did not have the same access to standard Arabic as men, it was men, and not women, who spoke a dialect approximating the standard variety (Abu-Haidar, 1988).

Undoubtedly, the movement of the country toward a tragic collapse in the 1990s and up has been reflected in women's literacy, employment and social status (Al-Jawaheri, 2008). Consequently, the current study includes 24 male and 24 female informants, representing the three age groups detailed in 3.5.2. It is concluded that the choice of gender as a social factor is inevitable in this study as it is believed to play a major role in the different realizations of lexical choice in the City of Baghdad.

3.4.2 Age

An April 2009 estimate of the total Iraqi population is 31,234,000 million peoples. Official statistics estimated that 43.3% of the population was fourteen years old and under; 63.3% of the population was twenty four years old and under and only 3% was 63 of age or older (Central Organization of Statistics and Information Technology, 2010). Essentially, this aging characteristic gives reasons for the selection of the three age groups.

In this study, where apparent time methodology is utilized, the division of informants into the three age groups already mentioned largely coincides with the major historical events affecting the political, social and economic situation in Iraq.

It is clear that youth in any society add vigor and productivity and they will, to be sure, add new patterns of variation and lead change in progress. In Iraq, they represent the majority of the population age categorization. For this reason, it is appropriate to divide the speech communities into three age groups, namely, 18-24; 30–40; 50-60. This division is based on three facts.

First, youth represent two thirds of the population. Statistically, if 63% of the population is at the age of 24 and under and 43% is at the age of fourteen, then 20% of the population ranges from fifteen to twenty four. And, if 3% is more than sixty three, this means the 34% is at the ages between twenty four and sixty two.

Therefore, in our division we focus on youth giving them a wide space to move softly in between the first and the second age groups.

Second, the age (50-60) was chosen as it represents the golden generation leading to the developmental (social and financial) impacts of the nationalization of Iraqi oil industry in 1961. The second age group is chosen within the age range of 30-40 as it represents the age group that grew during the developmental era (educationally and economically), however, this age group represents the informants who were children when the Iran-Iraq War was broken. This age refers to informants who lived in and viewed two of the biggest wars in the modern age: the 1991 War and the 2003 War. The first age group is in the age range of 18-24, these are adults who were born and raised in a politically, socially, economically and educationally unstable era.

Finally, this division has social significance in that (18-24) means the adherence of youth to their peer group pressures; informants (30-40) have the tendency to associate themselves more with the values of the society. Accordingly, they attempt to identify themselves with particular social networks. Indeed, they are characterized by dense and multiplex social networks. The last age group (50-60) represents more maturity and conservativeness than the former ones which can be mirrored in their choice of language and hence shows a particular linguistic pattern.

Finally, the gap between the age groups helps avoid any overlap between age groups and keeps a clear-cut linguistic division between informants.

3.5 Linguistic Variables

The search for the most salient features of a language or dialect enables the measurement of the linguistic behavior of a speech community. Labov (1972a) suggested three parameters for selecting linguistic variables: a variable must be (1) frequent, (2) structural, and (3) highly stratified (p.8). Taking these three parameters into consideration and alongside the findings of the pilot study, the linguistic variables under investigation are believed to be valid. Therefore, the general principles that underlie our choice of linguistic variables are: First of all, the selected language sample significantly correlate with social factors, i.e. gender and age of the speaker. For example, some variables which are involved in the process of change found to occur in the speech of people of different ages. Secondly, the linguistic variables under investigation occur frequently in natural speech of Baghdadis. Thirdly, these variables are easily identified for statistical application.

This section is devoted to explain the meaning of Iraqi new speech phenomenon. Indeed, translating some of these words is not an easy task. Among the strategies concerned, there are some that deal with untranslatable or culture – bound expressions (Nida, 1981). This really means that some of the words in this study have no counterparts in English. This problem; i.e. having no equivalents in the target language, is mainly because these words in their turn have no similar meaning in SA. There is an effort here to explain the meaning of these words as they are used and understood by speakers of Iraqi Arabic. The explanation of these words is based on the informants' points of view in the pilot study along with the researchers'

realization of these concepts. When Iraqi society had experienced new concepts; new words emerged to satisfy that social need and to fill a gap in peoples' linguistic performance.

3.5.1 Variable 1: (hawasim)

The new word *hawasim* /ḥawa:sim/ covers the whole situation of theft, corruption, occupation, and destruction. People at first used this term jokingly, but later the word intermingled in the speech of individuals. In Iraqi dialect, the word makes no sense; it has never been used before. Stansfield (2007, p. 194) contended that the new word is derived ironically from the last words of Saddam (the former president of Iraq up to 2003) regarding his war against the United States being final. He called the last battle *AL-Hawasim*, which in English means *the finalists*. Having been used in the everyday conversation of people raises logical linguistic questions, because no connection or semantic relationship exists between the word or its *sense*—being final—and its *reference*, namely, the things to which the word refers (i.e., theft, corruption, and occupation). What is of so much importance is not what the word intends to mean, but what people really mean. The main reason is that language varies and then changes as the experiences of people change.

Hawasim was first used as an instance of direct, harsh, unpleasant, or offensive language. The word was, indeed, one of the most efficient ways to do away with extra frustration, as many swearwords do. However, *Hawasim* was used sometimes to indicate a particular social group. Thus, when the word is used for this purpose, no frustration or anger is present. *Hawasim* refers to anything taken or done

illegally, such as theft (in particular from governmental institutions and banks), plagiarism, breach of law, financial corruption, patronage (favorism), reckless driving, incompetence, inefficiency, and the underqualification of a person to do a certain job. *Hawasim* denotatively refers to the very poor shelterless people who occupied and lived in government buildings and lands after the collapse of Baghdad and continue to live in these places. *Hawasim* is a plural word, yet it can be used to refer to both singular and plural.

In Standard Arabic, *hawasim* is a plural adjective used to express the meaning of putting an end to a particular issue. After 2003, *hawasim* was used to name the regime's battle against the United States, the consequences of that war led to a split on how people look at the situation. Some people think that Iraq has become a scene of theft and crime after the loss of the *AL-Hawasim* war. Others believe that Iraq has been destroyed because of the *AL-Hawasim* war. Therefore, that war put an end to the life and future of Iraq. In both cases, the consequences of the war and invasion lead to the same word, which refers to anything illegal. Certainly, the collapse of the Baghdad regime in 2003 led to the fall of all governmental institutions, such as ministries, courts, police stations, and all other legal departments that may keep order and protect people. Thus, the word *hawasim* as well as other words had been innovated. Today, *hawasim* takes different forms, which are derived to cope with new situations, such as *hawsama* (a noun referring to the situation of doing things illegally) and *hawsamchi* (a noun referring to the doer of the action).

A search using Arabic letters in Google will reveal a number of cultural forums named *Hawasim*, and many events and activities under the same name. Indeed, the use of *hawasim* is peculiar to Iraqis only because its use demands a speaker-listener social understanding, as seen in the following examples:

- sayya:ra hawasim (hawasim car): a stolen car
- sya:qa hawasim (hawasim driving): The driver has no driving license.
- shurta hawasim (hawasim police): They are inefficient in doing their duties.
- ama:la hawasim (hawasim workers): workers who do their job improperly

In some cases, *hawasim* has been standardized and used by some politicians in intense TV debates. Clearly, *hawasim* was initially borrowed from Standard Arabic, and then underwent a semantic shift. One of the amazing facts about *hawasim* is that in referring to the word "theft," it substitutes the generic name *Ali Baba*, which occupies a significant place in Iraq's long history and dialect.

3.5.2 Variable 2: (allas)

The second innovated word is *allas* /ʕəlla:s/. The duty of *allas* is similar to that of a spy. However, allas is not only a spy, because he or she does not only gather information about somebody, but also has a hand in the crime. The *allas* intentionally and indirectly guides the victim to a terrible unknown fate. The *allas* does this to take revenge on somebody, or take a ransom from the victim's family. *Allas* is derived from the old local word *alis* /ʕəlis/, which means "chewing food;" *allas*, in turn, is a borrowed form from Standard Arabic. Thus, the word was first

borrowed from Standard Arabic and then derived; accordingly, its meaning has been changed, too.

3.5.3 Variable 3: (qaffas)

Qaffas /qaffaːṣ/ is another innovated word. This word is originally derived from *qafas* /qafaṣ/, meaning "box" where birds are "imprisoned." *Qaffas* is then extended to refer to people who use certain tactics to fool others or cheat them. Thus, the victim has no way out of this box or /qafaṣ/. *Qaffas* was first derived, and then it underwent a semantic shift.

3.5.4 Variable 4: (tahshish)

Hashash /ḥətʃaːtʃ/ is a painful social phenomenon that came from outside the country and destroyed the youth who used to take the hashish and/or capsule to feel happiness. The process involved in creation of this word is derivation only. The use of *hashash* is not limited to refer to the youth, but to any individual who behaves in an unstable manner. Tahshish /taḥtʃiːtʃ/, on the other hand, is derived also from *hashash* to refer to the ability of combining fragments of sentences in a way that causes laughter from the present audience. Indeed, the word is derived from *hashash* because those individuals use words, fragments, and sentences illogically and thus cause laughter.

3.5.5 Variable 5: (kiki)

Kiki /kiki/ is a borrowed word. The origin of this word is unknown, and nobody knows how it was formed and by whom. *Kiki* refers to young people with particular haircuts and manner of dressing. They are distinguished by their appearance and

their different way of speech. During the history of Iraq, there was the *Breaki* individual who imitates popular break dancers. *Kiki* seems to be a reference to a particular type of song or dance; the innovative word might have come with the American soldiers to Iraq.

3.5.6 Variable 6: (hata)

Hata /ḥata/ refers to a very beautiful young girl aged between 15 and 24 years, dressed in a very modern style. The semantic component of the word is opaque. The question of whether this word involves social importance in reflecting some of the values of the Iraqi speech community is controversial. In some parts of Baghdad, another word is used to refer to the same meaning. The word is *muzza*, derived from Egyptian movies, and *muzza* seems to be a new innovation in the Egyptian dialect as well.

3.5.7 Variable 7: (ahsant)

Ahsant /əḥsant/ means "well done." *Ahsant* is a SA word that has never been used in an informal conversation. However, after 2003, the word became part of the speech of many people who have the tendency to show they are religious and/or educated. This word is the significant linguistic feature of religious men and people who in the past were deported to Iran and after the fall of Baghdad returned to the country.

3.5.8 Variable 8: (mawlai)

Mawlai /mawlai/ means "sir." The word refers only to "Sayyids" who belong to the family of the prophet "Mohammad." *Mawlai* implies a kind of respect and appreciation. Literally, *Mawlai* means "my sir." This word is widespread in the

country and used very often after 2003. Many of those Sayyids today occupy good positions in the Iraqi government, such as Ibrahim AL-Jaafari, who was elected as prime minister in 2005. However, this word has recently occupied an important space in the speech of young people, carrying meanings of friendship, mockery, and insult. The use of the word depends on the situation of speech and the relationship between the speaker and hearer. *Mawlai* is borrowed from Standard Arabic.

3.5.9 Variable 9: (mu'mmam)

Mu'mmam /muʕəmmam/ refers to any man wearing a turban. The *Sayyid* wears a black turban in Iraqi tradition, whereas the *Sheikh* wears a white turban. After 2003, a huge immigration of mu'mameen (plural) occurred from Iran to South Iraq, and a large number of them appeared outside *AL-Hawza* (the Islamic school in Najaf before 1,000 years). Nowadays, there is a resentful opinion against mu'mameen, and many people call for a split between politics and religion.

3.5.10 Variable 10: (sahwa)

Sahwa /ṣaḥwa/ means "awakening." Denotatively, the word refers to the military local forces of West Iraq, including Fallujah, which were formed in 2005 to fight AL-Qaeda. Connotatively, *sahwa* refers to the revival or awakening of conscience of the same local groups who were obliged to fight before 2005 with AL-Qaeda. *Sahwa* word involves multi processes, that is, borrowing from Standard Arabic, derivation, and semantic shift.

3.5.11 Variable 11: (militia)

Militia refers to groups of armed persons who protect the values and properties of the political parties with whom they work and from whom they get money. In some cases, anger and protest occur in the Iraqi streets against the militia's violence against the civilians. *Militia* was borrowed from English, and it seems to be the only borrowing. An example of the most famous militia in Iraq is that of *Muqtada AL-Sadder*. In North Iraq, Kurdish *Al-Beshmarga* is the most famous militia.

3.5.12 Variable 12: (irhab)

Irhab is a borrowed translation of the English word *terrorism. Irhab* first entered Arabic after the massive attack on the twin towers of the World Trade Centre. However, the use of *irhab* was limited in intense TV debates and the written texts in journals and magazines. After 2003, *irhab* started to substitute another word, *jihad*. *Jihad* is a Standard Arabic word that entered the English dictionary in the 1980s when the "Cold War" between the United States and the former Soviet Union was at its peak. *Jihad* was used in the west part of the country in addition to parts of Baghdad. The aim was to make *jihad* against the American troops; however, the aim was changed to make suicides against Iraqi people and police. *Jihad* was substituted by *irhab,* meaning "terror," by approximately all people who thought that the word was used to cover particular agendas in the area and spread the culture of killing.

3.6 Mechanism of Lexical Innovation

Countries are either monolingual (using one language), bilingual (that is, their members commonly use two languages) such as Canada, or multilingual (more than two languages are used in their people's daily life) such as Switzerland. Yet, there are cases in which the country is officially monolingual, despite the fact that political, religious and cultural factors may affect the decision of being monolingual or bilingual, but its members use more than one language or variety of language in their daily life as Lyons (1981,p.277) puts it that "The difference between the standard and the vernacular is… so sharp that…. has been classified in the recent sociolinguistic literature as a distinctive kind of Bilingualism: diglossia".

A society where there are two language varieties, one of high prestige (H), normally used for official use such as government, public speaking and education, and one of lower prestige (L), used for informal conversation such as the interaction within the family and friendship group, is said to be diaglossic. Both varieties, whether related to the same language, the case such as in Arabic where there is Standard dialect and colloquial dialects distributed into twenty one countries, or may be varieties of different languages such as French and Alsatian (a dialect of German in the Alsace region of France), are termed as diaglossic.

Ferguson (1959, p.435) originally defined diglossia as:

> Diglossia is a relatively stable language situation in which, in addition to the primary dialects of the language (which may include a standard or regional dialects), there is a very divergent, highly codified (often grammatically more complex) superposed variety, the vehicle of a large and respected body of

> written literature, either of an earlier period or in another speech community, which is learned largely by formal education and is used for most written and formal spoken purposes but is not used by any section of the community for ordinary conversation.

Peter Auer (2007, p.109) pointed out that "convergence between structurally distant language systems can lead to code switching, code mixing, lexical borrowing, borrowing and code mixing can occur between dialects just as between languages". Accordingly, in this study, the use of a standard form in an ordinary conversation is known to be *borrowing* since the difference between the two forms in the diaglossic situation of Arabic is so sharp.

The new innovative lexical items have undergone certain mechanisms. Table 3.2 shows those linguistic processes.

Table 3. 1: The Mechanism of Lexical Innovation

Lexical Item	Mechanism
/ḥawa:sim/حواسم	1. Borrowing from SA. 2. Semantic shift
/alla:s/علاس	1. Derivation 2. Semantic shift
/qəffa:ṣ/قفاص	1. Derivation 2. Semantic shift
/ḥətʃa:tʃ/ حشاش	1.Derivation
/kiki/كيكي	Unknown
/hata/حاته	Unknown
/ṣaḥwa/صحوه	1. Borrowing from SA 2. Derivation 3. Semantic shift
/militia/ميليشيا	1.Borrowing from English
/əḥsant/احسنت	1. Borrowing from SA
/mawlai/مولاي	1. Borrowing from SA

/muʕəmməm/معمم	1. Borrowing from SA
/irhab/ارهاب	1. Translation from English

It is clear that these are simple words referring to a particular meaning or situation. They are new, short, effective, direct, easily remembered and one word utterance**.**

3.7 Research Methods

The methodology of this study draws on insights from sociolinguistics and cognitive approaches. It is a study of variation and change in lexical aspects in the speech of Baghdadis which are thought to be influenced by social factors. In order to study the BSC to find out patterns of variation and change, there must be certain steps to follow. These steps form the backbone of the research. Therefore the research design focuses on the methods that have been adapted concerning the selection of informants, obtaining data as well as data analysis.

Approaching any speech community is considered the most difficult task a researcher encounters and upon which accurate results depend (for more details on fieldwork strategies see Jaber & Krishnasamy, 2012a). The choice of any of the well known methods such as that of choosing informants or eliciting data depends on how we look into the general formulation of the research. Feagin (2002, p. 20) pointed out that "the hypothesis that motivates the project will influence how to go about collecting the data". The selection of speakers, as well, involves some decisions that are determined by assumptions about the expected results. Some of these decisions relate to sample size. In fact, linguists aim at providing a

'representative' sample of the community under investigation (Wardhaugh, 1986, p. 146). In the Lower East Side, Labov (1966) elicited data from 88 speakers; Trudgill (1974) based his analysis on 60 informants; Milroy and Milroy (1978) depended on 48 to investigate the speech of three local areas in Belfast. Habib (2008) based her study on 52 speakers to quantitatively analyze the speech of rural immigrants in Syria. In addition, Taqi (2010) analyzed the speech of 48 speakers from two ethnicities to analyze the effect of one dialect upon another. And the teamwork of Shuy, Wolfram and Riley (1968) analyzed the speech of 36 speakers in Detroit. Therefore, we can say that it is the representativeness of the informant to speech community is of much importance rather than the number of informants.

3.7.1 Research Location: Baghdad

Baghdad, the capital and heart of Iraq, is the place where all races, ethnicities, religions and languages are found. Its population is about seven millions and it is located on the river Tigris. Baghdad has acquired through its history political and commercial power in the Muslim World during the Abbasid Caliphate. Not to forget saying that many of the One Thousand Night and One Night tales are set in Baghdad.

The Iraq-Iran War, the Gulf War and 2003 invasion of Iraq caused significant damage to Baghdad (for more information about Baghdad's history, people and location see Al-qazzaz, 2004).

Baghdad has been a center of "modernization since the last century" (Patai, 1962, p. 13); therefore, it is natural to those people living in other parts of the country to consider the BD prestigious. The BD has been standardized and become the lingua franca of Iraq and considered one of the prestigious dialects in the Arab World during the last century (Ferguson, 1972). It is really the language of education and commerce (for more information about the varieties spoken in Baghdad see Blanc, 1964).

In Baghdad, there are three main religious communities: Muslim, Christian, and Jewish. Each community speaks a different Arabic dialect (Blanc, 1964). It is the Muslim dialect which acts as the lingua franca. Non-Muslim Iraqis as well as Muslims from other dialect areas, all tend to speak the BD in interaction with anyone who is not from their own community (Blanc, 1964, p. 9).

According to Ibrahim (1986, p. 118), Standard Arabic ‘is inseparable from education’. In other words, the use of SA forms in everyday speech is parallel to one's level of education. Arabic scholars such as Mitchell (1986) referred to mixed spoken Arabic that varies between the Standard and the vernacular that is clearly discernible in most Arabic-speaking communities. Although several investigators have shown that a mixture of local vernacular and Standard Arabic form is not the prestige variety par excellence in several Arabic-speaking communities (Abd-El-Jawad, 1987; Bakir, 1986; Schmidt, 1986 among others), it would be difficult to deny its prestigious standing in light of its being used mostly by the educated section

of Arab society. However, the linguistic pattern in Baghdad is different from other Arabic dialects. In Baghdad, speech variation presents a continuum ranging from the local varieties spoken by the least educated, to the variety with the highest frequency of SA forms, spoken by those with the highest level of education.

From three different investigations of Baghdadi Arabic, Abu-Haidar (1989) found that the local dialect mixed with SA forms is the speech variety which enjoys most prestige in Baghdad. And contrary to the prestige varieties of Nablus (Abd-El-Jawad, 1987), Basra (Bakir, 1986), and Cairo (Schmidt, 1986), this prestige variety is in the direction of Standard Arabic. An example is the variation of the word sidq 'truth' (see Table 3.1). The Standard form *sidq* has five variants in the area surveyed in Baghdad. Variant (1), with metathesis, occurred in the speech of a few elderly illiterate people. Variant (2), without metathesis, was produced by both illiterate and semiliterate people who were not all elderly. Variant (3) is the Muslim realization of the form, and (4) with Standard /q/ is the non- Muslim variant that was realized by some Muslims.Variant (5) occurred in the speech of a number of educated men and women.

Table 3. 2: Variants of ṣidq in Baghdad with their Social Significance (based on Abu-Haidar, 1989: Figure 2, p. 473)

Form	Phonology	Social Stratification
ṣidq	[q], monosyllabic	literary Arabic, used by educated people
ṣidiq	[q], epenthetic[i]	originally non-Muslim, now used by some Muslims approximating literary Arabic, very frequent
ṣidug	[g], epenthetic [u]	Muslim form, most frequent

ṣidig	[g], epenthetic [i]	used by illiterate and semi-literate, all ages
ṣigid	[g], metathesis	used by illiterate, elderly people

The choice of Baghdad City as the locus of this investigation is largely based on account of its having a prestige dialect. Therefore, the choice of the BD from among a bunch of varieties is based on Abu-Haidar's investigations in Baghdad (1989) that the BD is the prestigious variety that constitutes the local dialect mixed with SA forms. It is the dialect that mostly adopted by other communities and millions of speakers in other parts of Iraq. Being a prestige dialect, Baghdadi Arabic imposes on its educated speakers to direct their speech towards the SA forms (Abu-Haidar, 1989). It also represents a good sample of people who faced political, religious and social impact changes. It is a place of great significance for changes that occurred since 2003. Since the objective of this study is to find out gender and age variation in their word choice, Baghdad is considered the target location to be put under investigation.

3.7.2 Sampling

In the process of conducting this research, a number of critical decisions had to be made to make the scope of this task more manageable and to ensure that the data adequately meet the objectives of the study. This was accomplished by carefully developing a sound plan for sampling study informants. The most important thing is to ensure obtaining a sufficient range of material and to take care that the process of selection will not bias or invalidate the findings (Kelly & Lesh, 1999; Leedy & Ormrod, 2001; Miles & Huberman, 1994; Neuman, 2000; Seidman, 1998; Smith & Osborn, 2003).

The selection of informants is designed to elicit the material wanted from a representative sample of speakers. . Milroy and Gordon (2003, p. 24) pointed out that "the strength of the conclusions one can draw depends on how accurately the sample represents the larger population". Certainly, there were some difficulties that might face any researcher such as that of inability to find certain sections of the population and lack of cooperation by certain subsections. Trudgill (1974) noted that interviewing the whole society is not practical; however, it is important to have enough sample. Trudgill (1974) concluded that samples should be small enough to provide an accurate investigation as time permits.

The method of sampling chosen for this study is the one used by Milroy (1980) in Belfast and Abu-Haidar (1989) in Baghdad. Milroy and Abu-Haidar depended mainly on friends to be introduced to other individuals who would later form their sample. These individuals participated in their interview, and furthermore, introduced them to other members of their respective social categories, leading to the so-called ‘snowball’ sampling. Therefore this study is based on a judgment sampling procedure depending on a predetermined list of sociolinguistic variables, mainly gender and age. This type of representativeness is accomplished by stratifying the sample according to sociolinguistic variables. This sample method is defined by two fundamental practices; in this regard, Milroy (1987, p. 26) explained that:

> The principle underlying judgment sampling is that the researcher identifies in advance the type of the speakers to be studied and then seeks out quota of speakers who fit the specified categories. A good judgment sample needs to be based on some kind of defensible theoretical framework; in other words, the researcher needs to be able to demonstrate his or her judgment is rational and well- motivated.

Judgment sampling requires extralinguistic justification for its selection criteria, whether sociological, demographic or otherwise. In the case that the composition and characteristics of the population is unknown, objectively specifiable dimensions can be sought in census data, community reports and it is useful to observe principles of random selection as strictly as possible in order to ensure reasonable representativeness across the sample[1].

This type of technique is widely used by researchers and proves to be successful such as Dubois and Horvath (1998), Lippi-Green (1989), Sankoff and Sankoff (1973), Payne (1976), Poplack (1985) and Tagliamonte (2006) among others. This approach has also been employed in a number of communities, some of which were considered warzones, such as Belfast (L. Milroy, 1980) and Detroit (Edwards, 1992). In studies on Arabic, some researchers used the judgment sampling procedure in their selection of informants. Among those researchers are Al-Muhannadi (1991) on Qatar Arabic, Al-Shehri (1993) and Khtani (1992) on Saudi Arabic, Habib (2008) on Syrian Arabic, and Taqi (2010) on Kuwaiti Arabic. Chambers (2003, p. 33) pointed out that judgment sampling has become the "consensus in the field" as he

[1] See Milroy and Gordon 2003, pp. 49-87 for excellent summary of sampling strategies.

thought that early studies in New York, Washington and Detroit have exercised a weak interpretation of representativeness.

Baghdad was approached through friends at Baghdad University in 2011 when the political crisis was at its peak. However, their support and help made it possible for the researcher to know other people outside the University campus who would later form the sample of the study (refer to Appendix B for more information about the gender, age and level of education of the informants). These individuals participated in the interviews and furthermore introduced the researcher to other members of their social networks. By choosing the 'snowball method' pioneered by Milroy and Milroy (1978), all participants were volunteering and no informants were obliged to participate which is also an ethical requirements of sampling in this research (Babbie, 1998). Therefore, it was found that this approach is suitable in Baghdad where peoples' lives are at stake. This method of sampling enabled the researcher to ensure a greater degree of informality than is possible in interviews following random sampling. Indeed, informal contacts with informants enabled the researcher to break the ice that might occur and to build a bridge of trust in situations where terror, fear, hatred and complain were the prominent factors of instability, violence and war.

However, according to Black (1999, p. 118), there are some disadvantages attached to snowball sampling. In most cases, the researcher has little control over the sampling method. The subjects that the researcher can obtain rely mainly on the previous subjects that were observed. In addition, representativeness of the

sample is not guaranteed because there is no idea of the true distribution of the population and of the sample. Sampling bias is also a fear of researchers when using this sampling technique. Initial subjects tend to nominate people that they know well. Because of this, it is highly possible that the subjects share the same traits and characteristics, thus, it is possible that the sample that the researcher will obtain is only a small subgroup of the entire population. Therefore, when taking into consideration snowball method sampling, the disadvantages should be carefully treated.

3.7.3 Collecting Data

It has been proven that in each data collection context, the objectives of the study and the target data or population combine to create a well-defined data set. Data collection is an important aspect of any type of research study. Inaccurate data collection can impact the results of a study and ultimately lead to invalid results. Data collection methods for variation and change vary along a continuum. At the one end of this continuum are quantitative methods and at the other end of the continuum are qualitative methods for data collection.

Data collection methods vary considerably and include such activities as administering questionnaires and psychological tests, interviewing, running focus groups, asking for a written description, observing behavior live or on videotape, and collecting articles from newspapers or magazines(Kelly & Lesh, 1999; Wilkinson, Kitzinger, Harré, & Moghaddam, 2003). In many studies several data collection methods are used together.

As a sociolinguistic study which requires a quantitative approach, the most reliable technique is face-to-face interview with informants of the community under study (Eckert, 1989, 1991a, 2000, 2003; Labov, 1966; Macaulay, 1977; L. Milroy, 1987; Trudgill, 1974 among others). Face-to-face interviews have a distinct advantage of enabling the researcher to establish rapport with informants and therefore gain their cooperation (Leedy & Ormrod, 2001).

During interview situation, the researcher aims at eliciting casual, free, spontaneous, and unmonitored speech which is usually referred to as the 'vernacular' such as that when the informant would use in every day conversation with friends and family (Llamas, 2007, p. 14). Labov (1966) developed a variety of techniques for eliciting spontaneous speech in spite of the presence of a linguist. Labov (1966, p. 209) pointed out that "the aim of linguistic research in the community must be to find out how people talk when they are not being systematically observed; yet we can only obtain this data by systematic observation". Labov made it clear that the presence of a linguist would affect the amount of attention a speaker pays to his/her speech which is usually referred to as the "observer's paradox". However, the reliance on naturalistic spoken data is so profound in sociolinguistics that a large proportion of energy spent developing sociolinguistic practices has focused on the refinement of the sociolinguistic interview as a method for the acquisition of naturalistic, conversational speech interviews (Kvale, 1999; Seidman, 1998; Smith & Osborn, 2003; Taylor & Bogdan, 1998; Terre Blanche & Kelly, 1999).

The researcher was careful in choosing a method that provides answers to the research questions. In this study the interview does not aim to elicit random free conversation from informants as it is usual in all western and Arabic studies which investigated that part of phonological language variation. In this study, the interview contains specific and close- ended questions rather than general and open ones. The aim of conducting the controlled method was not to elicit spontaneous speech, or affect the formality of speech characteristics as it is believed that controlled techniques result in a more formal environment, but to elicit specific data (refer to Appendix C). Starks and Mcrobbie-Utasi (2001, p. 82) stated that a controlled technique "is designed to elicit specific data that do not necessarily occur during the course of casual conversation". It was found that it is very difficult to obtain data contain certain words through free conversation. Therefore, the researcher relied on close-ended questions that provide quantitative data based on the researcher's response categories because they provide exact information needed by researcher. Closed ended questions are the ones where the informant has several response options to choose between.

Using close-ended questions, the interview looks very much like a questionnaire. The key difference between an interview protocol and a questionnaire is that the interview protocol is read by the interviewer who also records the answers. Therefore, the interview setting is important in building ties of trust and rapport. Probing is also available in face-to-face interviews (unlike questionnaires) and is used to reach clarity or gain additional information.

Beside from being usually expensive and time consuming, the only disadvantage attached to close-ended interviews is that the researcher assumes to know all the answers asking her informants to pick one. To avoid such a problem the researcher added the option of *others* to the choices available to the informant, which is advised by many researchers (e.g.Haladyna, 1999; Patten, 1998; Salkind, 1991; Schoer, 1970). In case the informant chooses this option then the researcher asked her informant to specify. In asking about Variable 7, for example, the variant [afya] emerged from *others* category. The variant [irhabiyin] also was an option made by informants, not the researcher, when adding the information through the interview to a question about Variable 10. In addition, Variable 11 shows three variants the third of which was informants' choice as *others*.

Before conducting the interviews, the researcher had several other people who are experts in the field and who are native speakers of the Baghdadi Dialect to review the items to identify any confusion associated with the questions, evaluate the appropriateness of the choices made, and give advice and feedback (Patten, 2004). The next step was to choose volunteers to answer the questions. Patten (1998) suggested having approximately five to ten randomly selected people, similar to the target population, answer the items and write down any concerns, problems, or errors they have. This procedure will eliminate any error that might occur during face-to-face interviews.

Abu-Haidar (1989) study in Baghdad used close - ended questions in her interview but without providing options to her informants and each informant was left to supply the appropriate term. She found that specific items were either pointed out or alluded to in conversation. For example, in investigating the proper name of a month or its corresponding ordinal number, she asked her informants a number of questions on the dates of birth- days, marriages, vacations, and so on.

In this study, to avoid the problem of the observer's paradox mentioned before, a visit was done to the informants' houses before conducting the intended interview to break the ice between the researcher and the informant and to make the informant get used to the atmosphere of interviewing. In addition, the researcher attempted to obtain samples from in-group members (e.g., with family members or peer group) to guarantee the extent to which the person is, or can be, truthful in responding. It is believed that the informant in isolation (artificial setting) will respond in terms of characteristics and behaviors that he or she believes to be socially desirable; therefore the test results may reveal not the person's actual linguistic choice, but rather an idealized image of how he or she would like to be judged by others. 12 pictures were attached to some questions in order to reveal the informant's emotions; make him/her involved in the scene and thus choose the word that matches the situation (refer to Appendix C).

The whole period of contacting informants, scheduling, rescheduling and interviewing lasted about 8 months during which time the researcher and informants

were struggling with time and place to conduct a single interview. Therefore, great efforts were made to convince Baghdadis of the importance of this research. Some informants were resentful of rescheduling occurred due to reasons such as when authorities impose curfew or when insurgents made actions as mentioned before.

Given the various advantages associated with face-to-face interviews, it remains one of the best methods of data collection as it provides the interviewer with the opportunity of establishing close contact with the interviewee and thus obtaining first-hand information. One of the advantages associated with interviewing is its wider range of application since it can easily be adopted for use with any group of population.

3.7.4 Data Validity

Validity involves the appropriateness, meaningfulness, and usefulness of inferences made by the researcher on the basis of the data collected (Wallen & Fraenkel, 2001). According to Patten (2004), data validity is determined by judgments on the appropriateness of the instrument. For this reason, in addition to the supervisor's knowledge, some professional colleagues were brought into the scene: colleagues who have perspectives, backgrounds, and areas of expertise similar and different from the researcher's own. The researcher brought just that many more cognitive resources to bear on how to tackle the research problem, how to find meaning in the data obtained, and how to measure and which tool available in the research market is suitable. Collaborating with others helped the researcher take advantage of the human mind as a tool of research.

3.7.5 The Pilot Study

Since there is only one linguistic study on lexical variation in Arabic sociolinguistics in general and Baghdadi Dialect in particular conducted by Abu-Haidar (1989), a pilot study was first conducted with 20 speakers in order to pinpoint relevant linguistic variables for a more wide-ranging study[2]. The pilot study was conducted in January 2010 and was vital in revealing many representative linguistic variables of lexical choice in the BD. Since no other research has been conducted on lexical items, the pilot study adopted a bottom-up approach by letting the choice of variables fall out of the differences that were found between the male and female speakers as well as by using the researcher's intuition and observation as a native speaker of Iraqi dialect about potential interesting variables.

Consistency of choice of specific words by one gender more than the other, and one age group more than the other, provided evidence of significant difference in Baghdadi dialect in terms of gender and age, and led to the choice of the linguistic and social variables in the final investigation reported more fully in Chapter 4.

The pilot study consisted of 20 informants, 10 male and 10 female. The informants of both genders aged between 25 and 45 years, chosen from the same educational

[2] A search in the Iraq Virtual Science Library – IVSL which provides full-text access to thousands of theses and dissertations conducted on different fields of knowledge in Iraq as well as thousands of scientific journals from major publishers and a large collection of on-line educational materials did not support this thesis with some studies that investigated sociolinguistic lexical choices in general and the 12 lexical items under study in particular. It was found that the study of Abu-Haidar (1989) was the only research conducted in Iraq on lexical variation.

university level. All informants were native speakers of the BD lived in the capital at the time of the recording.

The interview consisted of a 30 to 60 minutes free conversation on different issues[3]. This was carried out in order to detect the estimated differences occur in lexical items. The interview implemented in the pilot study depended on spontaneous free conversation. The researcher noticed that the informants had the tendency to give an opinion, to discuss matters, to participate in any object and to comment on the current political and social issues. Having the ability to speak, the interviewer was able to achieve the objective in a very natural way. As a result, this pilot study relied on an empathetic approach focusing on memories, real scenes, social problems and other psychological questions. Indeed, the informant would be involved in the topic so that the frequency of the suggested words is supposed to occur. This was followed by a PowerPoint elicitation task consisting of 50 slides in order to increase the number of occurrences of each word.

50 pictures of different objects were shown to the informants asking them to feel free to explain the content of the picture. Each object was chosen carefully so as to elicit the target word. These pictures are associated with Iraqis' life and society after 2003. For example, some pictures show Iraqi politicians; religion men also appear in other pictures; armed young people occupy the space of some pictures; and many other objects such as election, poverty, services and religion. At the end of the

[3] Period of recording depends on the speaker, for example his/her enthusiasm to cooperate; ability to comment and criticize; his/her personal affairs at that day and the security situation of the location where the interview was performed.

picture elicitation method, informants were asked about their attitudes towards the suggested words and other questions related to the origin, form and meaning of the lexical items under study.

In the *Political and Social Impact on the Linguistic Behavior of Iraqis* (Jaber & Krishnasamy, 2012b), the results of the pilot study were presented. Figure 3.1 below shows the differences between males and females in their choice of these words.

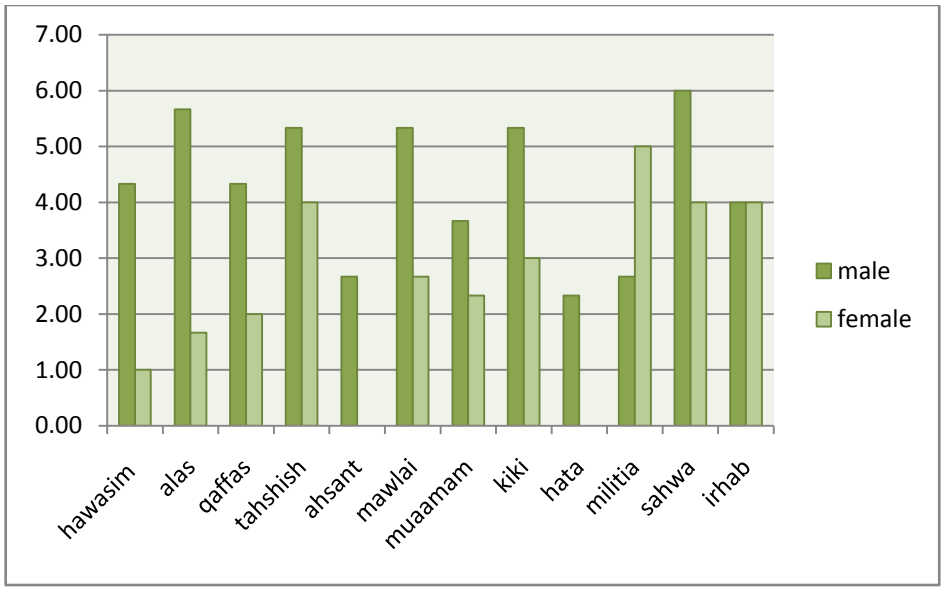

Figure 3. 3: Differences in Male and Female Choice of 12 New Words in the Pilot Study

In the pilot study, men, not women, used more of the innovative lexical items. For women, even if a word is standard, it might be excluded from female speech when it refers to a stigmatized concept. At the end of the pilot study, it was possible to pinpoint the occurrence of linguistic variables that could be used to gauge the frequency of the new forms in each informant's speech. The main study

was designed after testing the effectiveness of the variables under investigation; tools utilized to collect data, and the process of sampling the informants were determined.

The most important finding in the pilot study was the occurrence of other lexical items according to which people further vary in their speech. Those variants which have not been noticed before as different realizations between categorical variables imposed on the researcher to use the close – ended interview method. This method enables the researcher to elicit more than one variant for each question so that the researcher can correlate between them and measure the strength of relationship between those variables and the choice of people. As will be seen more fully in chapter 4 that some variants show stronger relationships with social factors than the ones under study which is a sign of language change. The following sub-sections will demonstrate the steps followed in conducting the main study.

3.7.6 Ethical Issues

The planning and conduct of any research must meet the standards of ethical practice which are recognized and adhered to internationally by researchers employing participants. McNamara (1994) identified five ethical concerns to be considered when conducting a research. These guidelines deal with voluntary participation, no harm to respondents, anonymity and confidentiality, identifying purpose and sponsor, and analysis and reporting. Each guideline will be addressed individually with explanations to help eliminate or control any ethical concerns.

First, in this study, the researcher made sure that participation is completely voluntary. In order to encourage a high response rate, Dillman (2001) suggested multiple contacts. For this study, the first contact was made by the key informant. Then locals in some areas made their second contact suggesting more people to be interviewed and, in some cases, recommending safe locations. The researcher made the third contact which followed by a visit to the informant's house. By doing such a procedure, the researcher assures that participation is voluntary.

McNamara's (1994) second ethical guideline is to avoid possible harm to informants. This could include embarrassment or feeling uncomfortable about questions. This study does not include sensitive questions that could cause embarrassment or uncomfortable feelings.

A third ethical guideline is to protect an informant's identity. This can be accomplished by exercising anonymity and confidentiality. An interview is anonymous when an informant cannot be identified on the basis of a response. An interview is confidential when a response can be identified with a subject, but the researcher promises not to disclose the individual's identity (McNamara, 1994). To avoid confusion, the contacts made clearly identified the interview as being confidential in regards to responses and the reporting of results. In this research, informant identification is kept confidential.

McNamara (1994) fourth ethical guideline is to let all prospective informants know the purpose of the interview. The purpose of the study was provided in the three contacts made indicating a need to explore a sociolinguistic study which examines the choices people made and some lexical variables. The contact also explained that the results of the study would be used in a thesis as partial fulfillment for a Doctoral degree.

The fifth ethical guideline, as described by McNamara (1994), is to accurately report both the methods and the results of the interview to professional colleagues in the educational community. Because advancements in academic fields come through honesty and openness, the researcher assumed the responsibility to report problems and weaknesses experienced as well as the positive results of the study.

Because of the reasons mentioned above, the informants' consents were asked to conduct the interviews (refer to Appendix C). They were informed that the data gathered will be treated with outmost confidentiality. When some people refused to be interviewed for any reason, then it was the duty of the researcher to find other informants to fill the quota sample. It was also the duty of the researcher to convince people of the importance of cooperating in such studies.

3.8 Data Analysis

After the fieldwork procedures of selecting informants and collecting data were conducted, the next step is to analyze data statistically. The analysis is essentially a

process of translating natural speech into data that allow comparison across speakers and linguistic process (see Butler, 1985; Fasold, 1984).

An SPSS program was used to enter the various dependent and independent variables. The independent variables were classified using a nominal measure that is assigned a numeric value in SPSS. For example, females and males were given the numbers 1 and 2 respectively. In this study, interview data is defined as a dependent variable, while the independent factors are the social variables *gender* and *age*. The statistical procedures will help understand which of these social factors plays a major or a minor role in the variation.

An instrument is valid if it measures what it is intended to measure and accurately achieves the purpose for which it was designed, whereas reliability refers to the quality of a measurement procedure that provides repeatability and accuracy (Patten, 2004; Wallen & Fraenkel, 2001). Patten (2004) emphasized that validity is a matter of degree and discussion should focus on how valid a test is, not whether it is valid or not. The researcher needs some kind of assurance that the instrument being used will result in accurate conclusions(Wallen & Fraenkel, 2001).

In order to raise awareness of the importance of checking assumptions in simple and multiple regression, four assumptions that were not highly robust to violations or easily dealt with through design of the study were focused on. Checking these assumptions carry significant benefits for the researcher. Making sure an analysis

meets the associated assumptions helps avoid Type I and II errors. As Pedhazur (1997, p. 33) noted, "Knowledge and understanding of the situations when violations of assumptions lead to serious biases, and when they are of little consequence, are essential to meaningful data analysis". Attending to issues such as attenuation due to low reliability, curvilinearity, and non-normality often boosts effect sizes, usually a desirable outcome. In this respect, there are many other non-parametric statistical techniques available to researchers when the assumptions of a parametric statistical technique are not met. Although these often are somewhat lower in power than parametric techniques, they provide valuable alternatives, and researchers should be familiar with them.

Regression assumes that variables have normal distributions. Non-normally distributed variables (highly skewed or kurtotic variables, or variables with substantial outliers) can distort relationships and significance tests. There are several pieces of information that are useful to the researcher in testing this assumption: visual inspection of data plots, skew, kurtosis, and P-P plots give researchers information about normality, and Kolmogorov-Smirnov tests provide inferential statistics on normality. Outliers can be identified either through visual inspection of histograms or frequency distributions, or by converting data to z-scores (Tabachnick & Fidell, 2000, p 139). Osborne's analyses (2001) showed that removal of univariate and bivariate outliers can reduce the probability of Type I and Type II errors and improve accuracy of estimates. Outlier (univariate or bivariate) removal is straightforward in most statistical software. However, it is not always desirable to

remove outliers. In this case transformations (e.g., square root, log, or inverse), can improve normality, but complicate the interpretation of the results, and should be used deliberately and in an informed manner (Osborne, 2001).

Standard multiple regression can only accurately estimate the relationship between dependent and independent variables if the relationships are linear in nature. As there are many instances in the social sciences where non-linear relationships occur (e.g., anxiety), it is essential to examine analyses for non-linearity. If the relationship between independent variables and the dependent variable is not linear, the results of the regression analysis will *under-estimate* the true relationship. This under-estimation carries two risks: increased chance of a Type II error for that IV, and in the case of multiple regression, an increased risk of Type I errors (over-estimation) for other IVs that share variance with that IV.

Cohen and Cohen (1983) suggested three primary ways to detect non-linearity. The first method is the use of theory or previous research to inform current analyses. However, as many prior researchers have probably overlooked the possibility of non-linear relationships, this method is not foolproof. A preferable method of detection is examination of residual plots (plots of the standardized residuals as a function of standardized predicted values, readily available in most statistical software). The third method of detecting curvilinearity is to routinely run regression analyses that incorporate curvilinear components or utilizing the nonlinear regression option available in many statistical packages. It is important

that the nonlinear aspects of the relationship be accounted for in order to best assess the relationship between variables (Goldfeld &Quandt, 1976).

In simple correlation and regression, unreliable measurement causes relationships to be *under-estimated* increasing the risk of Type II errors. In the case of multiple regression or partial correlation, effect sizes of other variables can be *over-estimated* if the covariate is not reliably measured, as the full effect of the covariate(s) would not be removed. This is a significant concern if the goal of research is to accurately model the *real* relationships evident in the population. Although most researchers assume that reliability estimates (Cronbach alphas) of .7-.8 are acceptable, others (e.g. Osborne, Christensen, & Gunter, 2001) reported that the average alpha reported in top Educational Psychology journals was .83, measurement of this quality still contains enough measurement error to make correction worthwhile.

Homoscedasticity means that the variance of errors is the same across all levels of the IV. When the variance of errors differs at different values of the IV, heteroscedasticity is indicated. According to Tabachnick and Fidell (1996) slight heteroscedasticity has little effect on significance tests; however, when heteroscedasticity is marked it can lead to serious distortion of findings and seriously weaken the analysis thus increasing the possibility of a Type I error.

This assumption can be checked by visual examination of a plot of the standardized residuals (the errors) by the regression standardized predicted value. Most modern statistical packages include this as an option.

Residuals are randomly scattered around 0 (the horizontal line) providing a relatively even distribution. Heteroscedasticity is indicated when the residuals are not evenly scattered around the line. There are many forms heteroscedasticity can take, such as a bow-tie or fan shape. When the plot of residuals appears to deviate substantially from normal, more formal tests for heteroscedasticity should be performed. Possible tests for this are the Goldfeld-Quandt test when the error term either decreases or increases consistently as the value of the DV increases as shown in the fan shaped plot or the Glejser tests for heteroscedasticity when the error term has small variances at central observations and larger variance at the extremes of the observations as in the bowtie shaped plot (Berry & Feldman, 1985). In cases where skew is present in the IVs, transformation of variables can reduce the heteroscedasticity.

The choice of an appropriate statistical procedure for the data requires therefore understanding the type of statistical distribution of those data with regards to each social group. That means, it is essential to know if the distribution is normal or not before selecting a procedure. Normality or non-normality is an important factor to arrive at accurate statistical results. However, the sampling distribution will not be normally distributed if the distribution is skewed (naturally) or has outliers (often

rare outcomes or measurement errors) messing up the data. One example of a distribution which is not normally distributed is the F - distribution, which is skewed to the right. If the distribution is not normally distributed, this will influence which statistical test/method to choose for the analysis.

In order to discover the type of distribution in the data, some descriptive statistics were examined. The Explore option from Descriptive statistics in the Analyze menu of SPSS was run. This procedure allowed the researcher to examine visually and numerically the distribution of each of the dependent variables against each group. That is, the distribution with respect to gender and age. This method also allowed discovering any outliers or extreme cases in the data.

These raw observations are entered into a Linear Regression (LR) to determine the effect of the extra-linguistic variables on the choice of the lexical variables. The multivariate procedure of the LR assumes a normal distribution of the data. The LR enabled the researcher to enter more than one independent variable at the same time and see the effect of each of the social factors on each of the dependent variables. Further, within the same model, the researcher was able to measure the main effects of each social variable as well as the interaction among those variables. Thus, the results have shown which independent variable is the most significant and which one is the least significant. Chapter 4 gives more details about the use of these statistical models.

In this research, a number of statistical methods were applied. The methods used to analyze data are: correlations to measure relationships between variables; partial correlations to exclude the effect of one variable; regressions to measure the strength of a relationship and make prediction. Independent t-test was applied to find out differences between males and females. Finally post hoc tests were used to compare age groups

Correlation was applied to describe the strength and the direction of relationship between variables. Simple bivariate correlation illustrated the correlation between two variables and is mainly the common measure of linear relationship (Coakes, 2005). The t-test tool was employed to test the factor as postulated by Ary et al. (2006) who also stressed that t-test is one of the most widely used tools in finding differences on gender.

The use of linear regression as a statistical method follows its widespread use in sociolinguistics for quantifying the relative effects of different factors in cases of language variation and change (Gorman & Johnson, 2012; Labov, 1994; Tagliamonte, 2006). Indeed, regression models are popular tools in sociolinguistics because they provide an efficient way to specify multiple predictors for a model. The overarching pursuit of much work in variationist sociolinguistics is the question of whether or the degree to which variants are related. The present study argues that statistical methods enable a more illustrative view of variation. This often involves

fitting regression models, focusing on the concepts and ideas that make these tools useful to language variation and change analysis.

In correlation, the scores obtained regarding one variable are correlated with the scores of another variable. In regression, the statistical calculation of such a correlation is done and expressed in terms of correlation coefficients. Basically, correlation procedures look at the strength between the variables whereas linear regression is about the best fit line in a graph. Creswell (2002) defined correlation as a statistical test to establish patterns for two variables. The statistical analysis of the research question can be conducted through a progression or sequence of analyses using a standard test for correlation that produces a result called "r." The r coefficient is reported with a decimal numeral in a process known as the Pearson Correlation Coefficient (Cooper & Schindler, 2001).

The product moment correlation coefficient (Pearson *r*) is commonly used for this purpose as long as the obtained results could be expressed as ratio or interval data. Since the results of the correlational studies are expressed in terms of correlation coefficients, the interpretation is given between -1.00 and +1.00. If the value of *r is* -1.00, this indicates a perfect negative relationship. If the value of *r is* +1.00, this indicates a perfect positive relationship. But 0.00 values implied zero relationship. Value less than .30 is low, and value that falls within .30 to .39 are low moderate. Absolute values from .40 to .60 are regarded as moderate. Any value from .61 to .80

is considered moderately high and value above .80 is regarded high (Coakes, Steed, & Ong, 2009; Van Eman, 2009).

The regression test produces an F-statistics that is used to calculate the p-value. If $p< 0.05$ and $p<0.01$, the null hypothesis is rejected and the research hypothesis is accepted and this leads to the conclusion that the average of the dependent variable is not the same for all groups. Rejecting the null hypothesis is an indication of relationship. Adding to this, Cronbach's coefficient alpha was used to determine the internal reliability of the statistical method used. Moreover, Excel charts are used to illustrate sociolinguistic variability. Charts and figures give a clear overall view of the variation found which are going to be explained in SPSS tables where significance is tested.

3.9 Summary

In approaching any speech community quantitatively, there are certain principles governing our choice of a particular method. Making a decision about the type of method selected is one of the most difficult tasks facing any researcher. The choice of any technique such as that of selecting informants and collecting data should be helpful in reaching the objectives of the research taking into consideration the ethical issues that might occur.

Sociolinguistics is a fieldwork – based discipline which needs patience and courage as long as there is a community to be approached and data to be elicited. Thus, it is not easy to find an occurrence for a particular word, yet it is not difficult to find

ways which make that occurrence possible. It is this type of knowledge that invokes researcher to keep on towards the most difficult circumstances to achieve the aims of the research study.

CHAPTER FOUR
RESULTS OF DATA ANALYSIS

4.1 Introduction

This study investigates lexical variables which are thought to be relevant for Iraqi Arabic due to their correlation with social variability. The chapter starts with technical explanations which illustrate the basic elements of statistical methods that represent necessary components of the general understanding of the quantitative approach. Then, this chapter investigates and analyzes the 12 lexical variables (refer to 3.6).

4.2 Technical Explanation

Generally, the goal of every research or scientific analysis is to find relations between variables. Correlational research involves measuring such relations (correlations) between some set of variables, such as gender and the choice of a lexical item in the most straightforward manner. Correlation method investigates *strength* of relationship between two variables (Peacock & Kerry, 2007).

In this research, the goal is to perform both calculations: correlation and regression. Linear regression analyzes the relationship between two variables, X and Y. In general, the goals of linear regression (Peacock & Kerry, 2007) are to:

i. Investigate nature of relationship between two variables (one variable is the dependent; the other is the independent variable).

ii. Identify how much the dependent variable changes when the independent variable changes.

iii. Give the equation of the line which can be used for prediction.

In partial correlation, one of the variables being correlated say x and y is adjusted for the effect of other variables so that these other variables can be taken out of the correlation. In simple language, we can say that in all the correlations performed we excluded the effect of gender to find out how much change occurs to the age variable in its correlation with the lexical variable; and we excluded the effect of age to find out the change in the gender variable on the choice of any lexical item (further information on each of the concepts, correlations and regression can be found in statistical textbooks such as Glass (1996), Kachigan (1986), and Runyon and Haber (1976).

In LR, a model of the relationship is hypothesized, and estimates of the parameter values are used to develop an estimated regression equation ($y = \beta_o + \beta_1 x_1 + \beta_2 x_2 + \varepsilon$). Various tests are then employed to determine if the model is satisfactory. If the model is deemed satisfactory, the estimated regression equation can be used to predict the value of the dependent variable given values for the independent variables. In simple linear regression, the model used to describe the relationship between a single dependent variable y and a single independent variable x is $y = a_0 + a_1x + k$. a_0 and a_1 are referred to as the model parameters, and is a probabilistic error term that accounts for the variability in y that cannot be explained

by the linear relationship with x. If the error term was not present, the model would be deterministic; in that case, knowledge of the value of x would be sufficient to determine the value of y.

The Pearson Correlation Coefficient (r), or correlation coefficient for short is a measure of the degree of linear relationship between two variables, usually labeled X and Y. While in regression the emphasis is on predicting one variable from the other, in correlation the emphasis is on the degree to which a linear model may describe the relationship between two variables. In regression the interest is directional, one variable is predicted and the other is the predictor; in correlation the interest is non-directional, the relationship is the critical aspect. Values of the correlation coefficient are always between -1 and +1. The sign of the correlation coefficient (+, -) defines the direction of the relationship, either positive or negative. A positive correlation coefficient means that as the value of one variable increases, the value of the other variable increases; as one decreases the other decreases. A negative correlation coefficient indicates that as one variable increases, the other decreases, and vice-versa. Taking the absolute value of the correlation coefficient measures the strength of the relationship. A correlation coefficient of r=0.50 indicates a stronger degree of linear relationship than one of r=0.40. Likewise a correlation coefficient of r= - 0.50 shows a greater degree of relationship than one of r=0.40. R square or R^2 is the proportion of variability in the sample (Myers, Well and Lorch, 2010), in other words the percentage of the contribution of the independent variable to the variation of the dependent variable ($0 \leq R^2 \leq 1$).

The R^2 value is calculated from the ANOVA table and equals the value between group sum-of-squares divided by the total sum-of-squares as follows:

$$R^2 = \frac{SSY - SSE}{SSY}$$

$$SSY = \sum (Yi - \overline{Y})^2$$

$$\text{SSE} = \sum (Yi - \hat{Y}i)^2$$

Using a model represented by the model summary in this chapter can help us think about processes or mechanisms, so when we fit a model to our data, we obtain best-fit values that we can interpret in the context of the model.

The two most elementary formal properties of every relation between variables are the relation's (1) magnitude *size* and (2) its reliability *truthfulness*. The magnitude 'size' is much easier to understand and measure than the reliability. For example, if every male in our sample was found to have a higher *linguistic choice of a word* than any female in the sample, we could say that the magnitude of the relation between the two variables *Gender* and *lexical choice* is very high in the sample. In other words, we could predict one based on the other. The reliability *truthfulness* of a relation pertains to the *representativeness* of the result found in the specific sample of the study for the entire population. In other words, it says how probable it is that a similar relation would be found if the study was replicated with other samples drawn from the same population. Research is interested in the sample only to the extent it can provide information about the population.

Because this study meets some specific criteria, then the reliability of a relation between variables observed in the sample can be quantitatively estimated and represented using a standard measure (technically called p-value or statistical significance level). The significance (p) level tells the probability of error involved in rejecting the idea that the relation in question does not exist in the population. This hypothesis (that there is no relation or no difference in the population) is usually called the *null hypothesis*. Although strength and reliability are two different features of relationships between variables, they are not totally independent. In general, in a sample of a particular size, the larger the magnitude of the relation between variables, the more reliable the relation is.

4.3 Data and Statistics

In the following subsections the description and analysis of the 12 variables will be presented fully by analyzing statistical data.

4.3.1 Data and Statistics for Variable 1

The variable (hawasim) has been the focus of this study due to its occurrence which varies from one situation to another (as mentioned in the sub-section 3.6.1). During the elicitation of data collected, a pattern was found whereby it was recorded as [hawasim], while others were recorded as [harami], [mujrim] and [mutajawiz]. Thus, four variants are concerned with the distribution of this linguistic variable in the BD. In order to understand the rational for this variation in the choice of the word with a target variant, the lexical items recorded in this study were divided into three groups so as to isolate any potential lexical factors that might affect the

linguistic choice: (i) variants that give the meaning of *thief*, (ii) variants that give the meaning of *criminal,* (iii) variants referred to the *act of exceeding* or *overtaking*.

Accordingly, the variable (hawasim) has shown four variants according to which the [hawasim] variant was found to covary with the other three variants:

i. Variant 1: [hawasim] was explained in details in Chapter 3 (refer to 3.6.1).

ii. Variant 2: [harami] meaning 'thief' is a generic variant which is equal to *Ali Baba*. It is a colloquial word used by almost all Iraqis. However, it has been substituted by [hawasim] after the war in 2003. In standard Arabic, its counterparts are lis /liṣ/ and sariq /sariq/. The non-standard word [harami] is shared by many Arabic dialects such as the Egyptian, the Gulf and the Levantine dialects. It is a well- known variant to all Arabs and many proverbs were established on the basis of the meaning of this variant.

iii. Variant 3: [mujrim] meaning *criminal* is a standard variant used by Iraqis to refer to people who are doing illegal things after 2003. Before this time, the use of this word was rarely heard by people in their public speech except in mass media.

iv. Variant 4: [mutajawiz] meaning *a person who is overtaking* is a standard variant that has never been used before 2003 as a standard word referring to *people who live in and occupy governmental institutions*; neither was it used by people to reflect the original meaning of the word except by those who work and interested in legal terminology.

Each group of variants was statistically treated, analyzed and interpreted separately because each one was used in a different situation and gave a different meaning. However, these variants can be shown in three choices according to the meanings to which they are confined. In what follows, there is an explanation of the results obtained from these choices.

4.3.1.1 Analysis of Variant 1 and Variant 2

Figures 4.1 and 4.2 display the choice of (hawasim) as [hawasim] and [harami]. The Figures represent the informants grouped in terms of gender and age. Figure 4.3 shows the total choices of the variants [hawasim] and [harami] according to age groups of both genders. The measure of the degree of linear relationship between the gender, age and the two dependent variants was calculated from the *R* values. Table 4.1 represents the correlation between the social factors and the linguistic ones.

Figure 4.1 shows the choice of the variant [hawasim] by males and females according to their age groups. From the Figure, it is clear that none of the young female group aged 18-24 chose the variant [hawasim] and only one out of eight female informants aged 50-60 chose this word. It is also clear that the male 30-40 age group preferred the choice of [hawasim] more than the other male groups. In addition, only two informants of the young male 18-24 age group chose [hawasim].

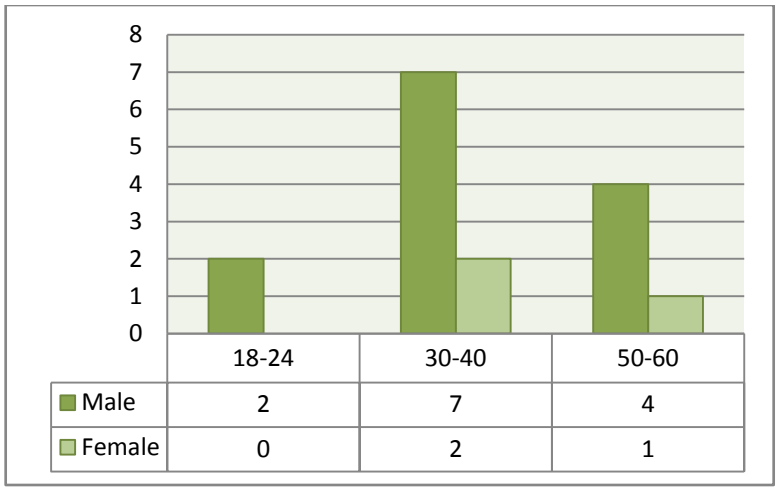

Figure 4. 1: The Choice of [Hawasim] According to Gender and Age

Figure 4.2 below shows the choice of [harami] by males and females according to their age groups. In general, the colloquial word [harami] is the preference choice of most females, especially the first age group. Moreover, this word is the choice of young male aged 18-24. It is also clear that the male 30-40 age group registered the low number of informants who chose [harami].

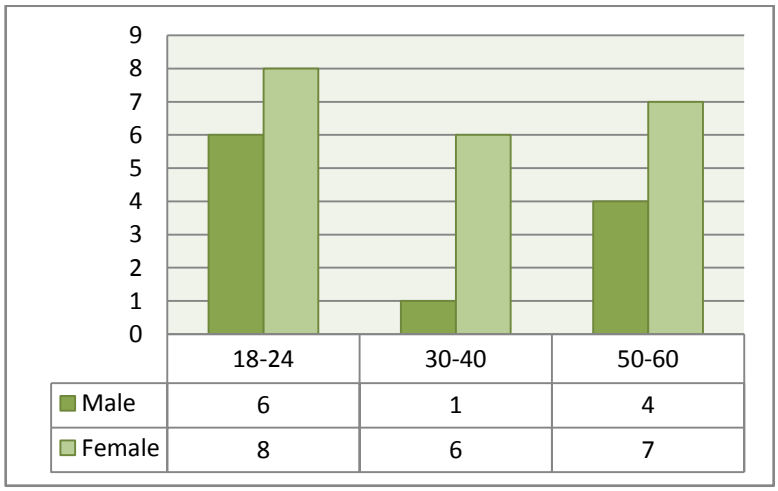

Figure 4. 2: The Choice of [Harami] According to Gender and Age

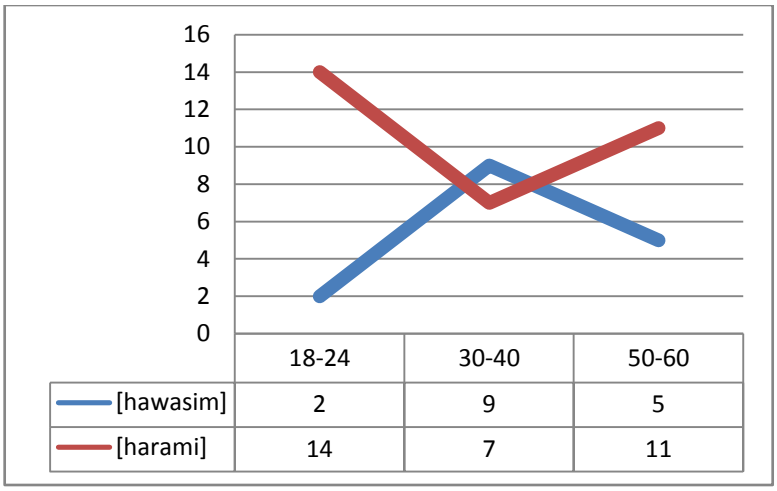

Figure 4. 3: The Choice of [Hawasim] and [Harami] According to Age Groups

From the figure above, the distance that separates between the two choices of the young, middle-aged and old informants is very clear.

In order to investigate the nature of relationship between the independent variables (age and gender) and the dependent linguistic variable (hawasim) and to identify how much the variants of the dependent variable change when the number of informants changes, correlation equations were performed. Because there is no prior theory to suggest whether the relationship between the independent variables (gender and age) and the linguistic choice of a new lexical item would be positive or negative, this thesis will opt for the two-tailed test. Two-tailed test is the p values associated with the correlation. The footnote under the correlation table explains what the single and double asterisks signify. With these two pieces of information: the significance level and type of test (two-tailed), we can test the significance of the correlation found. Table 4.1 below shows the Pearson correlation coefficient values the and level of significance obtained.

Table 4. 1: The Correlation between Gender, Age and the Variants [Hawasim] and [Harami]

Correlations					
		GENDER	**AGE**	**[hawasim]**	**[harami]**
GENDER	Pearson Correlation	1	.320	-.442**	.668**
	Sig. (2-tailed)		.082	.002	.001
	N	48	48	48	48
AGE	Pearson Correlation	.320	.210	-.390*	.378*
	Sig. (2-tailed)	.082	.232	.004	.004
	N	48	48	48	48

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

This Table shows that there is a strong correlation between the independent variable gender and the two linguistic variants. As expected, gender was negatively correlated with the variant [hawasim], r= -0.442, p< 0.01. A negative correlation coefficient of 0.442 indicates that 44% of the time, when the number of informants increases, the choice of the linguistic variant [hawasim] decreases. The level of significance indicates that the odds are less than 1 out of 100 that this is a chance occurrence; therefore it is not a chance finding and that the correlation is *statistically significant*. Thus the null hypothesis is rejected. On the other hand, the gender of the informant was positively correlated with the variant [harami], r= 0.668, p< 0.01. A positive correlation coefficient of 0.668 indicates that 67% of the time, when the number of informants increases, the choice of the linguistic variant [harami] increases as well.

As shown in Table 4.1, a significant relationship was found between the age of the informant and the variants [hawasim] and [harami] but only under 0.05. It was found that the age of the speaker correlates with [hawasim]. A negative correlation coefficient of -0.390 indicates that 39% of the time, when a difference in ages between informants increases, the choice of the linguistic variant [hawasim] decreases. Also, a positive correlation coefficient of 0.387 indicates that 39% of the time, when a difference in ages between informants increases, the choice of the linguistic variant [harami] increases as well.

Table 4.2 is the Model Summary table of [hawasim]. This table provides the R and R^2 value. The R value is 0.471, which represents the simple correlation and, therefore, indicates a good degree of correlation. The R^2 value indicates how much of the dependent variant [hawasim] can be explained by a linear regression on the independent variable, gender and age. In this case, 22% can be explained, which is very small. In thus squaring correlations and transforming covariance to percentage terms, the study gets an efficient way to understand meaning of correlation. And the researcher is then in a position to evaluate a particular correlation.

Table 4. 2: The Model Summary of [Hawasim]

Model Summary							
Model					**Change Statistics**		
	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.471[a]	.222	.187	.430	.222	6.408	2

a. Predictors: (Constant), AGE, GENDER

However, the model summary of [harami] is different in that it can predict 52% of the variable from both gender and age. The R = .741, R^2 =.523 which is medium and the model is deemed satisfactory. Therefore the variant [harami] is of a better position in the BD than the variant [hawasim].

Table 4. 3: The Model Summary of [Harami]

Model Summary							
Model					**Change Statistics**		
	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.741[a]	.523	.587	.448	.523	5.908	2

a. Predictors: (Constant), AGE, GENDER

The next Table is the ANOVA table of [hawasim]. This table indicates that the regression model predicts the outcome variable significantly well. Regression row shows the Sig. column. This indicates the statistical significance of the regression model that was applied. Here, P = 0.004 which is less than 0.01 and indicates that,

overall, the model applied is significantly good enough in predicting the outcome variable.

Table 4. 4: The Significance of the Regression Model of [Hawasim]

ANOVA[b]						
	Model	**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	2.365	2	1.182	6.408	.004[a]
	Residual	8.302	45	.184		
	Total	10.667	47			

a. Predictors: (Constant), AGE, GENDER

b. Dependent Variable: [hawasim]

However, the significance level of the regression of [harami] is stronger than that of [hawasim] (Table 4.5), here p=001 which indicates that the model is significantly very strong in predicting [harami] from gender and age.

Table 4. 5: The Significance of the Regression Model of [Harami]

ANOVA[b]						
	Model	**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	3.365	2	1.172	5.408	.001[a]
	Residual	8.302	45	.174		
	Total	11.667	47			

a. Predictors: (Constant), AGE, GENDER

b. Dependent Variable: [harami]

Tables 4.6 and 4.7 below provide the information necessary to predict the linguistic variants [hawasim] and [harami] from gender and age. It has been shown that the constant, gender and age contribute significantly to the models (by looking at the Sig**.** column); yet the significance of [harami] is stronger than [hawasim].

Table 4. 6: The Effect of Predictors on the Choice of [Hawasim]

Coefficients (a)						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	Std. Error	Beta		
1	(Constant)	.771	.248		3.108	.008
	Gender	-.417	.124	-.442	-3.360	.002
	AGE	-.367	.223	-.362	-3.235	.010

a. Dependent Variable: [hawasim]

Table 4. 7: The Effect of Predictors on the Choice of [Harami]

Coefficients[a]						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.961	.248		3.108	.008
	GENDER	.664	.124	.664	3.360	.001
	AGE	.387	.076	.387	1.235	.004

a. Dependent Variable: [harami]

Let's focus on the three predictors, whether they are statistically significant and, if so, the direction of the relationship. First, for [hawasim] the age (b=-0.367) is significant (p=0.01) and the coefficient is negative which would indicate that it is an important factor in the choice of the linguistic variant [hawasim]. It is expected result to obtain. Next, the effect of gender (b= -0.417, p=0.002) is significant and its coefficient is negative indicating that the greater the proportion people make linguistic choice, the lower the percentages of choosing [hawasim]. Second, for

[harami], the age (b=0.387, p=0.004) is significant and the coefficient is positive. The effect of gender of this variant (b= 0.664, p=0.001) is very significant and its coefficient is positive indicating that gender plays an important role in the choice of this variant and thus indicate linguistic variation between males and females.

Since the independent variable gender has the most effect on the choice of both [hawasim] and [harami], it is important to understand which gender has the significant effect. Tables 4.8 and 4.9 provide the actual results from the independent t-test and Levine's test for equality of variances. We report the statistics in the following way: t(degrees of freedom[df]) = t-value, P = significance level. In this case, this would be: t (46) = -3.341, P < 0.001. The mean values of both males and females are different where the mean value of male equals 0.54, for female the mean value equals 0.13. Since variances are not equal, F test = 28.059 is significant at p= 0.000. This indicates that there are differences between males and females, and the effect is from the males on the choice of [hawasim].

Table 4. 8: The Effect of Gender on the Choice of [Hawasim]

Independent Samples Test					
		Levene's Test for Equality of Variances		**t-test for Equality of Means**	
		F	Sig.	t	df
[hawasim]	Equal variances assumed	28.059	.000	3.341	46
	Equal variances not assumed			3.341	39.972

Table 4. 9: The Significance of the Effect of Gender on the Choice of [Hawasim]

Independent Samples Test					
			t-test for Equality of Means		
			Sig. (2-tailed)	Mean Difference	Std. Error Difference
[hawasim]	Equal variances	assumed	.002	.417	.125
	Equal variances not assumed		.002	.417	.125

The percentages of the linguistic choice [hawasim] by both genders undoubtedly show that [hawasim] is a male choice with the percentage of 81%. On the contrary, the percentage of 19% shows that females did not prefer the choice of this word.

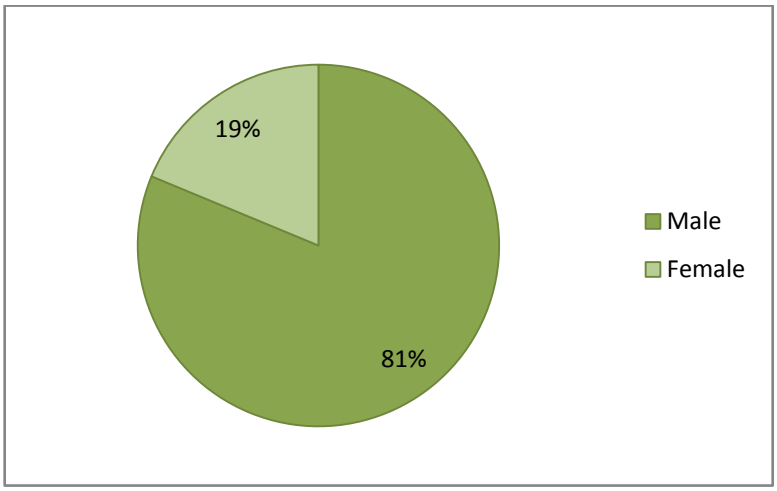

Figure 4. 4: The Percentage of Choosing [Hawasim] According to Gender

On the contrary, for the variant [harami] the mean values of both males and females are on the opposite side of [hawasim] where the mean value of male equals 0.15, for female the mean value equals 0.63. Since variances are not equal, F test = 30.011 is very significant at p= 0.000. This indicates that there are differences between males and females, and the effect is from the females on the choice of [harami].

Table 4. 10: The Effect of Gender on the Choice of [Harami]

Independent Samples Test					
		Levene's Test for Equality of Variances		**t-test for Equality of Means**	
		F	Sig.	t	df
[harami]	Equal variances assumed	30.011	.000	3.362	46
	Equal variances not assumed			3.362	39.123

Table 4. 11: The Significance of the Effect of Gender on the Choice of [Harami]

Independent Samples Test					
			t-test for Equality of Means		
			Sig. (2-tailed)	Mean Difference	Std. Error Difference
[harami]	Equal variances	assumed	.002	.362	.124
	Equal variances not assumed		.002	.362	.124

A One way ANOVA test shows that there is effect from age groups on the choice [hawasim] and[harami] but it is only significant at $p<0.05$ (Tables 4.12 and 4.13).

Table 4. 12: Significant Difference between Age Groups of choosing [Hawasim]

ANOVA					
[hawasim]					
	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	1.542	2	.771	3.801	.020
Within Groups	9.125	45	.203		
Total	10.667	47			

Table 4. 13: Significant Difference between Age Groups of choosing [Harami]

ANOVA					
[harami]					
	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	2.552	2	.761	3.801	.022
Within Groups	8.115	45	.213		
Total	10.667	47			

Then the Post Hoc test shows the significance of the differences of age groups on the choice of [hawasim] and the effect is from age group 1with 2. It is clear that informants at the age of 30-40 from both genders differ significantly from young informants aged 18-24 in their choice of [hawasim] and [harami]. See Tables 4.14 and 4.15 below:

Table 4. 14: The Effect of Age Groups on the Choice of [Hawasim]

Multiple Comparisons						
[hawasim]Games-Howell						
(I) AGE	**(J) AGE**	**Mean Difference (I-J)**	**Std. Error**	**Sig.**	**95% Confidence Interval**	
					Lower Bound	**Upper Bound**
1	2	.438*	.154	.023	-.82	-.06
	3	-.188	.147	.421	-.55	.18
2	1	.438*	.154	.023	.06	.82
	3	.250	.175	.341	-.18	.68
3	1	.188	.147	.421	-.18	.55
	2	-.250	.175	.341	-.68	.18

*. The mean difference is significant at the 0.05 level.

Age 1= 18-24, Age 2= 30-40, Age 3= 50-60.

Table 4. 15: The Effect of Age Groups on the Choice of [Harami]

Multiple Comparisons

[harami] Games-Howell

(I) AGE	(J) AGE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	.426*	.153	.020	-.82	-.06
	3	.210	.146	.411	-.45	.16
2	1	.426*	.153	.020	.06	.82
	3	.254	.175	.321	-.16	.48
3	1	.210	.146	.411	-.16	.45
	2	-.254	.175	.321	-.48	.16

*. The mean difference is significant at the 0.05 level.

Age 1= 18-24, Age 2= 30-40, Age 3= 50-60.

From the correlation and regression equations, it is clear that there are effects from gender and age on the choice of both [hawasim] and [harami] but one is negative and the other is positive and thus indicating that variation is significant and a change may lead to the drop off [hawasim] and stability of [harami]. In this case, they are the young informants, especially females who are the innovators leading a change toward the colloquial variant [harami] instead of [hawasim].

4.3.1.2 Analysis of Variant 1 and Variant 3

It has been shown that [hawasim] also covary with the variant [mujrim] and a number of tokens were obtained in the interview from the question: What do you call the person who does illegal things?

Figures 4.5, 4.6 and 4.7 represent the choice of [hawasim] and [mujrim] according to gender and age groups. From the figures, we see that females did not choose [hawasim] to refer to the act of being criminal. In addition, the number of males who chose this variant is represented by two informants from the middle age group and only one from the old informants. Meanwhile, the choice of [mujrim] exhibits no variation between informants and thus both genders show similar lexical choice to refer to the meaning of criminal. Adding to this, the age groups behave similarly in their both choices. Finally, the figures show that the number of informants decreases in their choice of [hawasim] and increases in their choice of [mujrim].

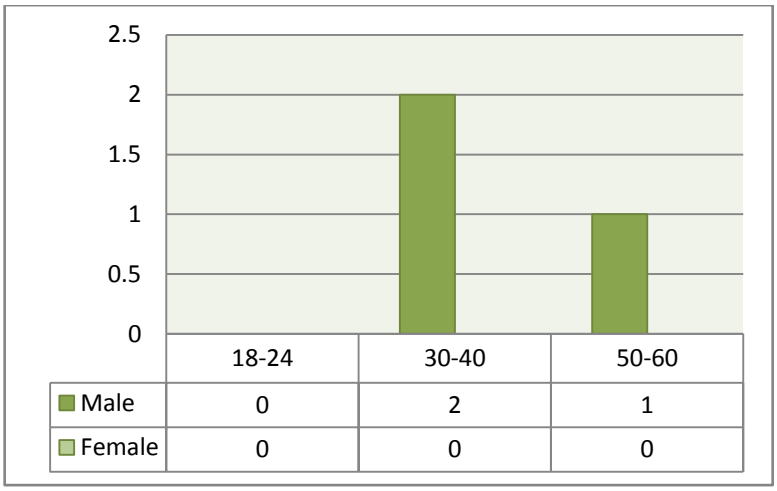

Figure 4. 5:The Choice of [Hawasim] Meaning 'Criminal' According to Gender and Age

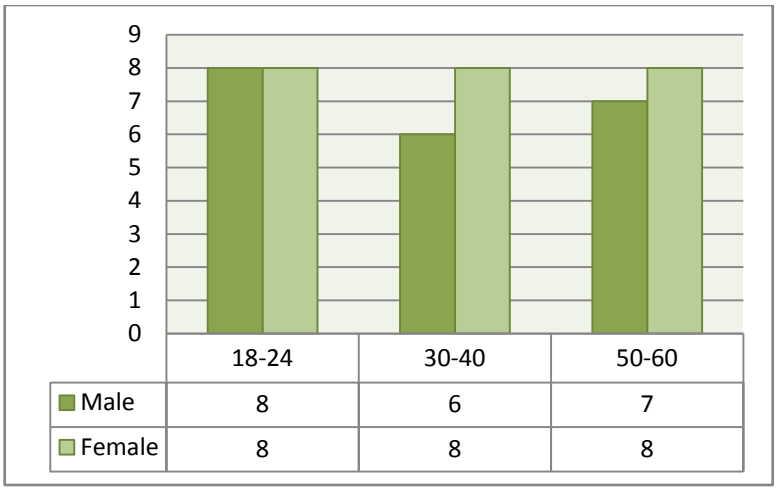

Figure 4. 6:The Choice of [Mujrim] According to Gender and Age

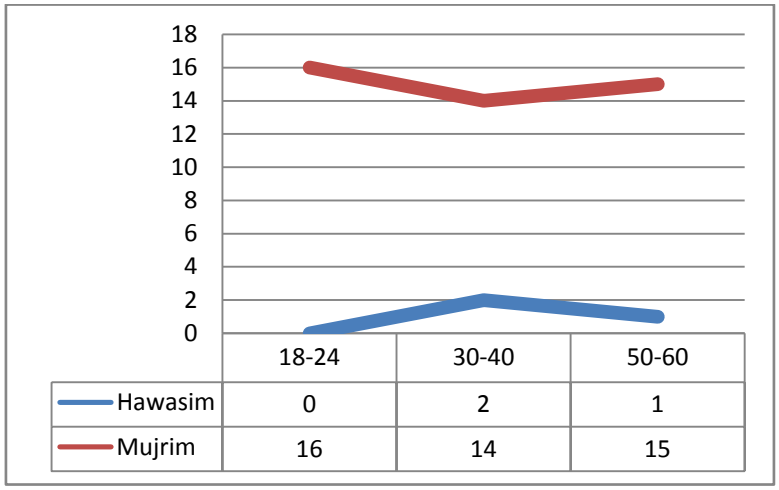

Figure 4. 7: The Choice of [Hawasim] and [Mujrim] According to Age Groups

The correlation between the dependent and independent variable show no significance obtained from the two choices even when partial equations performed (refer to Appendix D). In regression the R square equals 0.078, p=162 for [hawasim]; R^2 =0.008, p= 185 which is very weak. For this reason, people agree on

one choice and the values presented mean that gender and age have no effect on the choice of both variants therefore they cannot predict the values of the lexical items.

4.3.1.3 Analysis of Variant 1 and Variant 4

The choice of [hawasim] and [mutajawiz] is shown in Figures 4.8, 4.9 and 4.10 below which represent that different groups exhibit different choices. It is clear that [hawasim] is a male choice and it is the middle aged male group that shows the highest choice along with the females of the same age. It is also clear that no choice is shown by the young and old females.

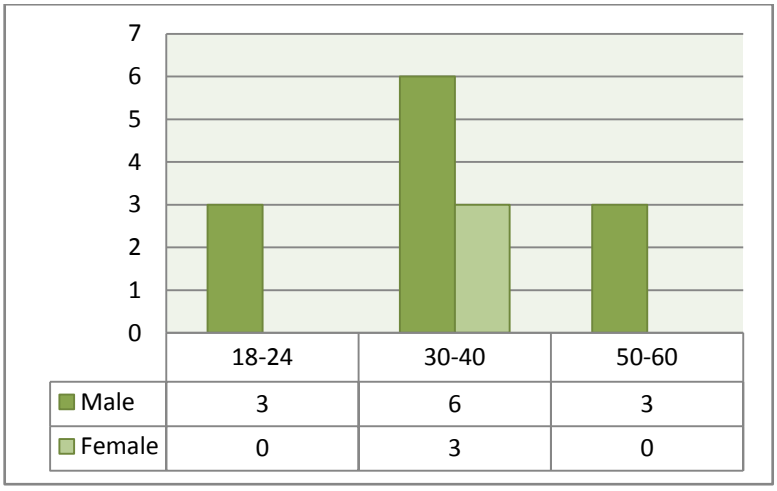

Figure 4. 8: The Choice of [Hawasim] Meaning 'Overtaking' According to Gender and Age

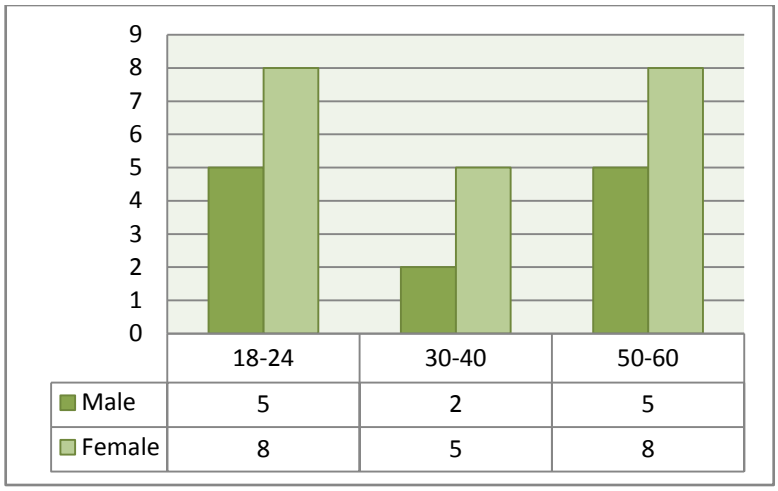

Figure 4. 9: The Choice of [Mutajawiz] According to Gender and Age

Both genders also chose [mutajawiz], however the young and old females, once again, behave similarly and show the highest choice of this variant. The distance between the two choices is repeated between the age groups. The same scenario of [hawasim] and [harami] is repeated here. Undoubtedly, the middle age group of both genders are stable in the mid line choosing the least from both variants. Figure 4.7 gives clear picture of this variation.

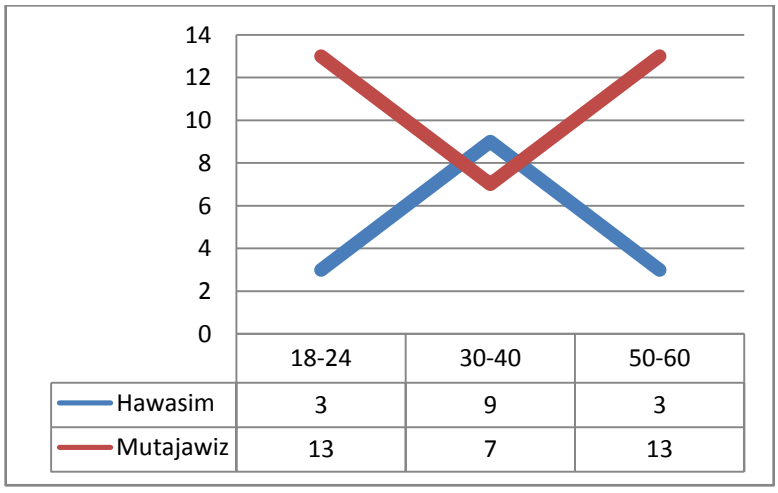

Figure 4. 10: The Choice of [Hawasim] and [Mutajawiz] According to Age Groups

The correlation (refer to Appendix D) show that there is strong effect from gender on the choice of both variants: [hawasim] and [mutajawiz]; however, there is mild effect from age on that choice. From tables of correlation, the coefficient of gender on [hawasim] is negative and on [mutajawiz] is positive which indicate that the increase number of people increases the choice of [mutajawiz] and decreases the choice of [hawasim]. For this reason the model summary, although it is significant, shows that the model is weak (not strong enough) to predict [hawasim], $R^2 = 0.238$. Adding to this the model summary of [mutajawiz] is stronger than that of [hawasim], R=0.799, R^2 =0.578 (medium) which is good enough to explain variation.

Since gender has the most effect, the t-tests for both variants are significant (refer to Appendix E). They show that it is male age groups who show effect on the choice of [hawasim] but they are females who show effect on the choice of [mutajawiz]. In Appendix F, the post hoc tests which represent multiple comparisons across age groups show that it is always a difference between the first and second age groups from one hand and the second and third age groups on the other for both choices.

4.3.1.4 Discussion of Variable 1

The first variable explored was (hawasim), which has four main variants in the Baghdadi dialect: [hawasim], [harami], [mujrim] and [mutajawiz]. As females are believed to hold a prestigious place on the social scale, [harami], [mujrim] and [mutajawiz] have been adopted as the prestige variants. Females prefer the colloquial variant [harami] when it comes to reflect the meaning of *thief* instead of

[hawasim]. Females also prefer the use of two standard words [mujrim] and [mutajawiz] instead of [hawasim] to refer to *criminals* and *the poor occupying governmental buildings* respectively. It has been found in this study that young females not only have shown a sharp decline in the use of [hawasim], but stigmatized its choice the most. The middle aged females have shown that their choice is swinging between the four variants.

The [hawasim] is the variant mostly associated with Males. It is the middle aged group that shows the most choice of the variant among the other male age groups. In addition, the same male age group shows the least choice of [harami], [mujrim] and [mutajawiz]. Indeed, this coincides with the linguistic behavior of females of the same age. Moreover, males and females of the ages 18-24 have shown approximately similar linguistic pattern in their choice of the four variants of the variable (hawasim). Finally, the old from both genders show choices in between the other age groups. It is concluded that this variable is a male choice and it is the choice of middle age group.

The colloquial variant [harami] is a female preference especially women aged 18-24. And, the standard word [mujrim] meaning *criminal* was the choice of both genders from three age groups; however the linguistic behavior of males aged 30-40 showed less choice than all other groups. The same linguistic pattern has been shown in the choice of the [mutajawiz] variant. This standard word was a female choice with the highest choice by the young and old females. The choice of females of the three age

groups coincides with the linguistic behavior of males. The same number of young and old males chose this variant. The variable (hawasim) has shown consistent linguistic pattern from both genders of three age groups.

4.3.2 Data and Statistics for Variable 2

By investigating the (allas) variable (refer to 3.6.2.) in the speech of educated males and females of three age groups, it was found that age, gender and lexical status affect the choice of this variable. It was also found that [allas] is not the only variant chosen by speakers; other variants seem to covary in natural speech, i.e. [mujrim] and [irhabi].

4.3.2.1 Analysis of Variant 1 and Variant 2

The [allas] variant is the new innovation in the BD which emerges to fill a semantic linguistic gap in peoples' performance. However, the standard variant [mujrim] which appears to covary with more than one variant (such as that with [hawasim] variant) has correlated significantly with the gender and age of the speaker.

Figure 4.11 shows the choice of the variant [allas] by males and females according to their age groups. From the figure, it is clear that none of the young female group aged 18-24 chose this variant. It appears that two females out of eight at the age 30-40 preferred [allas] and only one out of eight female informants aged 50-60 chose this variant. It is also clear that the male 30-40 and 50-60 age groups preferred the choice of [allas] more than the young male 18-24 age group.

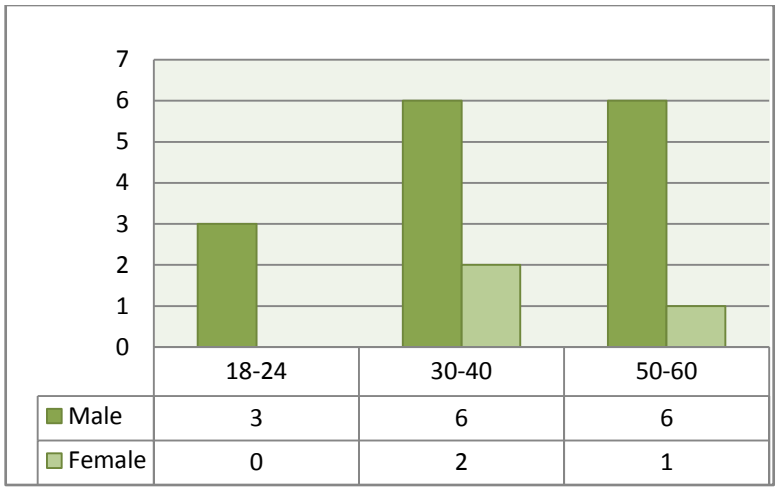

Figure 4. 11:The Choice of [Allas] According to Gender and Age

Other informants prefer the choice of [mujrim] and the distribution of that choice is shown in Figure 4.12 according to the gender and age of the informants.

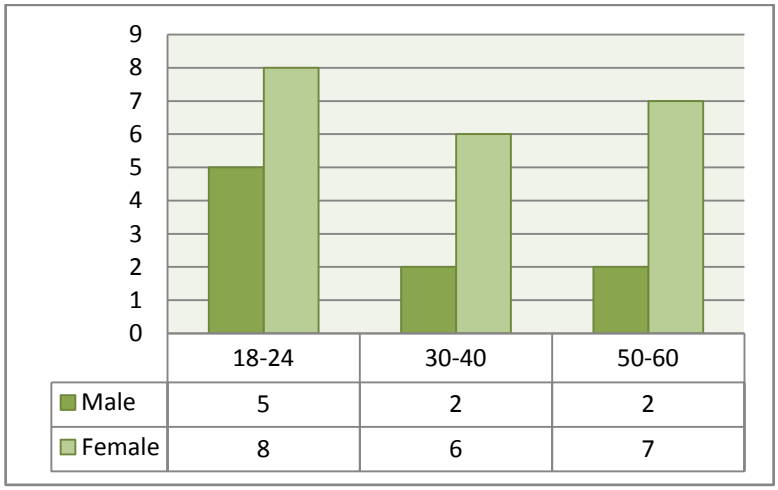

Figure 4. 12: The Choice of [Mujrim] According to Gender and Age

The Figure shows that it is the female groups who chose the variant [mujrim] most often especially the young females. It appears also that the male 18-24 preferred the choice of [mujrim] more than the other male groups. The line chart in Figure 4.13 combines the choice of both variants according to the informants' age. The distance

between the two choices of those young informants is very clear. In addition, the middle age group varies equally in their two choices. Finally, for all informants the preference choice is the [mujrim] variant.

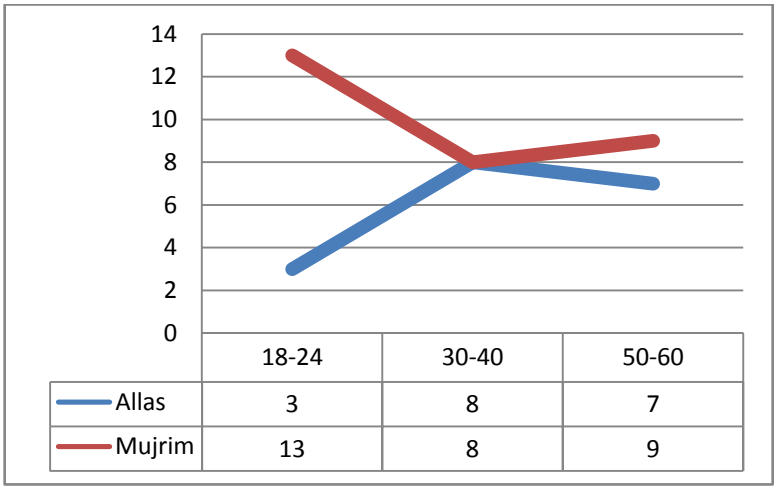

Figure 4. 13: The Choice of [Allas] and [Mujrim] According to Age Groups

The relationship between the independent variables (age and gender) and the dependent linguistic variants [allas] and [mujrim] is investigated to know how much the dependent variants change when the independent variables change and to identify the direction of that change. Therefore, correlation and partial correlation tables tested the significance of the association (refer to Appendix D).

It is clear that there is correlation between gender and the dependent variants [allas] and [mujrim] respectively. However, the direction goes to both sides: one positive and one negative. The gender was negatively correlated with the variant [allas], r= -0.516, p< 0.001. A positive correlation coefficient of 0.516 with the variant [mujrim] was noted. The level of significance indicates that the odds are less than 1 out of 1000 that this is a chance occurrence; therefore it is not a chance finding and

that the correlation is moderately significant. Thus the null hypothesis is rejected. And, when excluding the age factor and performing the partial correlation, we found that the coefficient correlation for both variants increases, r= -0.528 for [allas] and r= 0.528 for [mujrim] (see Appendix D). It was also found that little significance is noted between the age of the informant and the variants [allas] and [mujrim]. It was calculated that r = -0.321 for [allas] and r= 0.321for [mujrim] and thus significance obtained, $p<0.05$. The R value for [allas] is 0.558, which represents the simple correlation and, therefore, indicates a good degree of correlation.

The R^2 value indicates how much of the dependent variant [allas] can be explained by a linear regression on the independent variable, gender and age. In this case, 31% can be explained, which is very small and a logical justification should be indicated for this choice. Moreover, different results of R and R^2 have been obtained from the model summary of [mujrim], R^2 =0.511, p=000 which is good enough to predict the outcome variant. The ANOVA test also shows that the regression models are significant in explaining the variance (refer to Appendix D). It is clear that both the constant, gender and age contribute significantly to the model at $P <0.001$ and p=0.000 respectively. The coefficient Table shows the three predictors; i.e., their significance and the direction of the relationship. The age (b=-0.325) is significant (p=0.012) and the coefficient is positive which would indicate that it has a minor effect on the choice of [allas]. Next, the effect of gender (b= 0.500, p=0.000) is very significant and its coefficient is positive. Finally, the percentage of constant (b=0.875, p=0.001) is significant and the coefficient is positive as well. For

[mujrim], gender is very significant where b = 0.500, p=0.000; whereas age has little significance, p<0.05 (refer to Appendix D).

As long as the independent variable gender has the most effect on the choice of the [allas] and [mujrim], it is important to find out whether they are males or females who affected the choice of both variants. Appendix (E) that has the t-test tables provides the actual results. For the variant [allas], it is found that: t (46) = 4.090, P < 0.001. There are therefore differences between males and females, and the effect is from the males on the choice of [allas]. Allas is a male choice with the percentage of 83%. On the contrary, the percentage of 17% shows that females did not prefer the choice of this word.

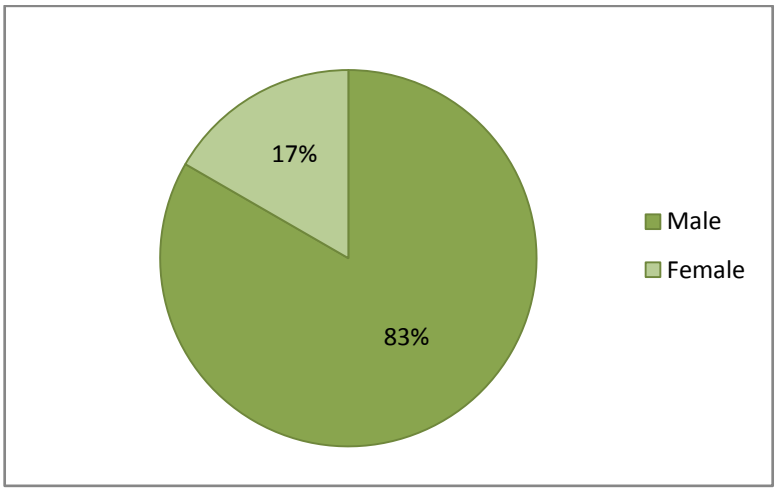

Figure 4. 14: The Percentage of Choosing [Allas] According to Gender

A one way ANOVA test shows that there is little effect from age groups on the choice of the two variants. As a result, age is not considered an important social factor in the choice of this new word and for both variants it is the first group aged

18-24 which has an effect in comparison with the second age group (refer to Appendix F).

4.3.2.2 Analysis of Variant 1 and Variant 3

Figure 4.15 shows the choice of the variant [allas] by males and females according to their age groups. From the figure, it is clear that none of the young and old female groups chose this variant. It appears that four females out of eight at the age 30-40 preferred [allas]. It is also clear that the male 30-40 age group preferred the choice of [allas] more than the young and old male age group.

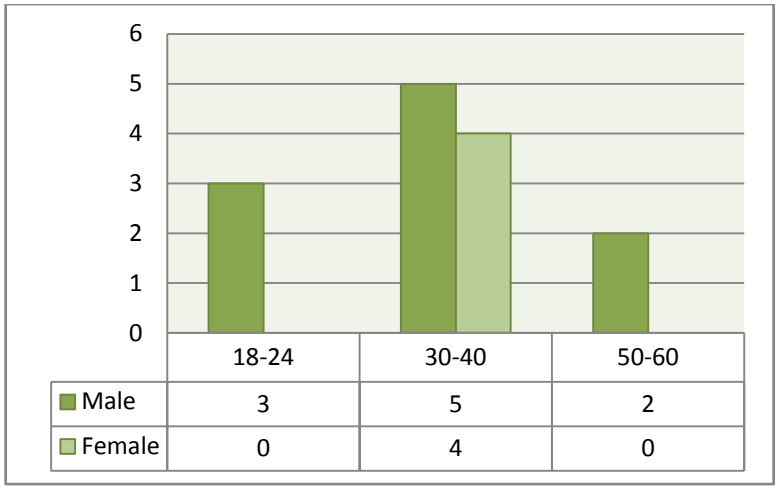

Figure 4. 15: The Choice of [Allas] Meaning 'Criminal' According to Gender and Age

Other informants in the sample prefer the choice of [irhabi] and the distribution of that choice is shown in Figure 4.16 according to the gender and age of the informants. The Figure shows that it is the female groups who chose the variant [irhabi] most often especially young and old females. Males, on the other hand, behaved similarly but to a lesser degree than their female groups. The line chart in Figure 4.17 combines the choice of both variants according to the independent

variable age. The distance between the two choices of those young and old informants is very clear. In addition, the middle age group varies equally in their two choices. Look at the Figures:

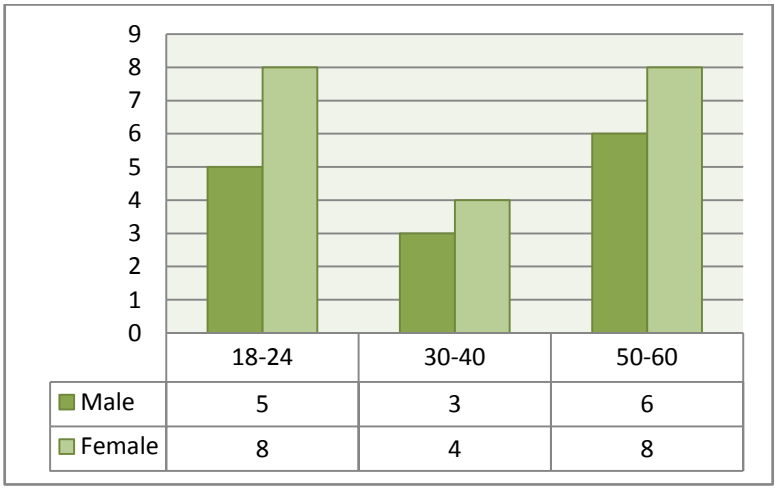

Figure 4. 16: The Choice of [Irhabi] According to Gender and Age

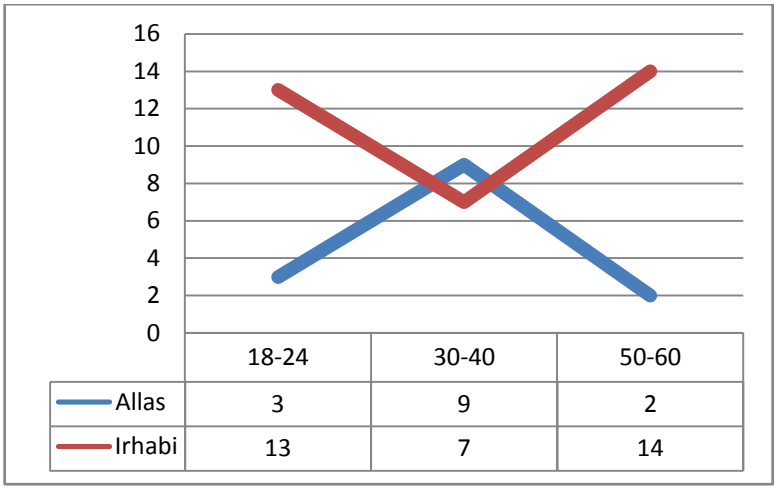

Figure 4. 17: The Choice of [Allas] and [Irhabi] According to Age Groups

The Figures above show the strong effect of age on both variants which is confirmed by the correlation and regression tables (refer to Appendix D). Tables show the effect of age on the choice of [allas] and [irhabi] but only under 0.05 and the effect

in both cases is from age group 1 (18-24) with 2 (30-40) and 3 (50-60) with 2. There was no effect from the gender of the speaker on the choice of [irhabi] since both genders agree upon the meaning this word reflects. However, gender was positively correlated with [allas], r=- 0.445, p< 0.01 and they are males who affect that choice (refer to Appendix E). Figure 4.18 shows the percentage of choosing [irhabi] by both genders which reflect no variation noted as far as the choice of this variant is concerned.

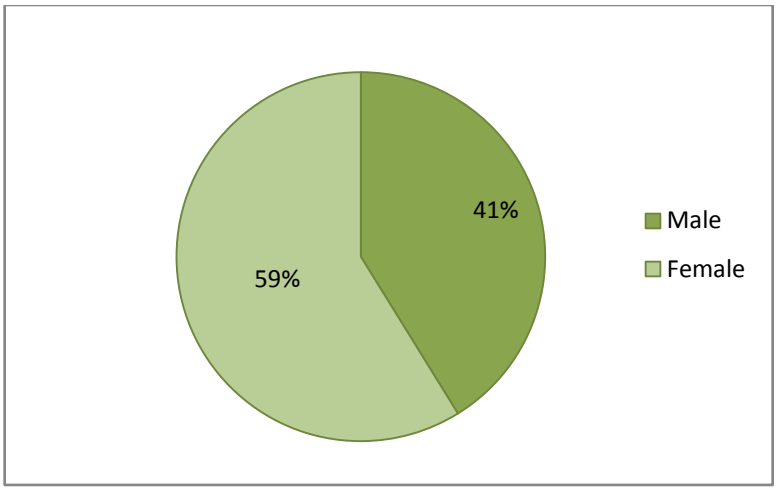

Figure 4. 18: The Percentage of Choosing [Irhabi] According to Gender

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4.3.2.3 Discussion of Variable 2

It has been shown that the variant [allas] is a male choice. The older and middle-aged groups chose [allas] more than the young group. On the other hand, female speakers showed less choice of [allas] than the male speakers across the three generations. Moreover, the decline of choice of [allas] by female speakers by age group is greater than that found in the male's speech, suggesting that the females are catching up with the males with regards to the decline in [allas] choice. All females

preferred the choice of [mujrim] *to* refer to *the person who gathers information about a victim* more than males across generations. It is the females aged 18-24 who chose this variant more than the other female age groups. In addition, it is the young males who preferred the standard variant [mujrim] than other male groups. The middle and old ages from both genders behaved similarly as far as the choice of this variant is concerned.

It is found that all females chose [irhabi] meaning *terrorist* more than males across generations. However, the variant [allas] is still a choice of females from the middle age group and this group showed the least choice of [irhabi] among other female groups. In this question, none of the young and old females chose [allas]. The young and old females have shown similar linguistic pattern as far as the choice of (allas) is concerned. It is also found that in both questions, males aged 30-40 preferred the choice of [allas] more often. However, with the percentage of 41%, it is clear that [irhabi] is also a male choice despite the fact that their choice was less than females.

4.3.3 Data and Statistics for Variable 3

Figure 4.19 shows the choice of the word *qaffas* by males and females according to their age groups. From the figure, it is clear that neither males nor females of the age 50-60 chose this word. It is also clear that the young informants from both genders chose [qaffas] variant more than other male and female groups of the age 30-40.

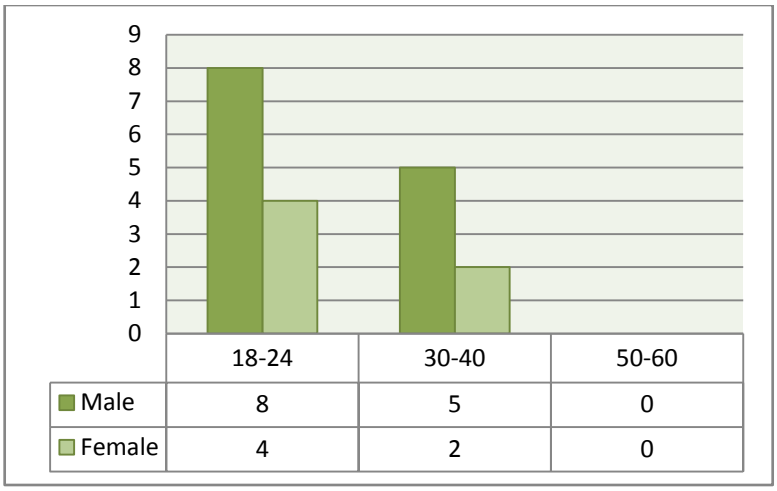


Figure 4. 19: The Choice of [Qaffas] According to Gender and Age

However, [qaffas] was not the only variant obtained. The interview has shown that this variant covaries with other words and hence represents systematic lexical variation across generations. Figure 4.20 shows the choice of [nasab] by age and gender. The [nasab] is a colloquial word (meaning cheater) that might be diffused to BD through Egyptian films during the 1980s. This would explain the highest choice of this word by females at the age 30-40. This variant might be diffused into the community through this age group and it held some prestige at that period. Figure 4.20 shows the distribution of this variant across age groups.

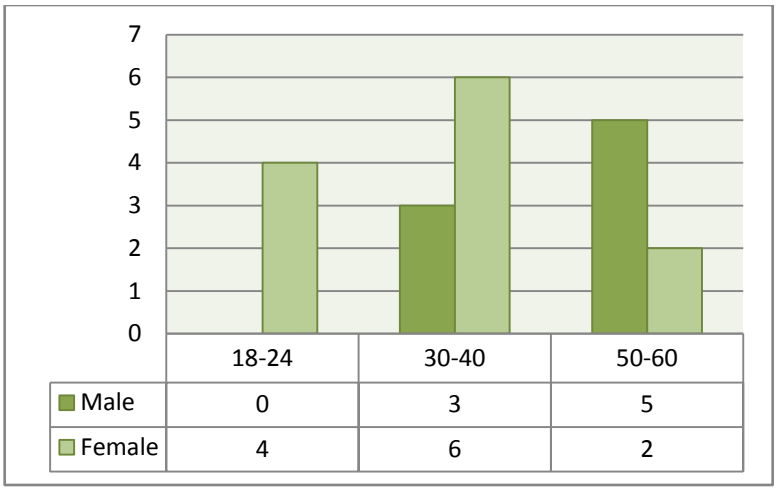


Figure 4. 20: The Choice of [Nasab] According to Gender and Age

The Figure shows no choice made for this variant by young males. Also, it shows that the old males preferred this variant more than the other male groups. The third variant which occupies a good space in the speech of old informants from both genders is the [ghashash] variant. Figure 4.21 shows the distribution of this variant across gender and age groups.

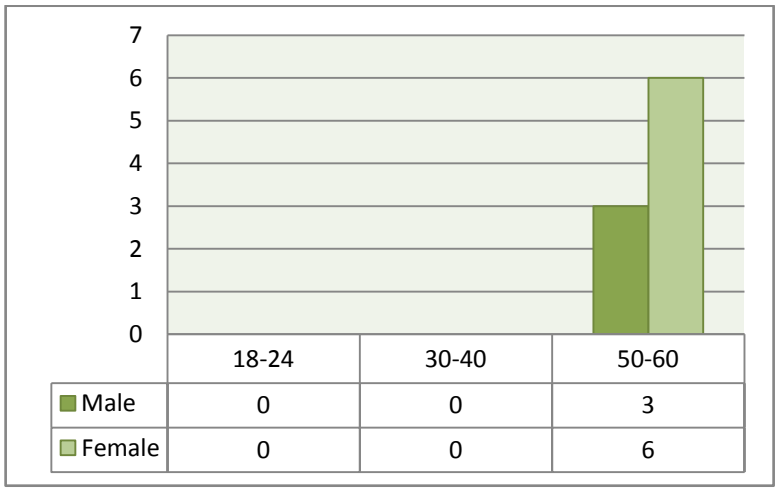


Figure 4. 21: The Choice of [Ghashash] According to Gender and Age

The line chart that was repeated in more than one occasion has been distributed this time by a zero choice of [qaffas] variant by old informants. Instead a new variant line (the green one) has gone up to make a choice for a third variant, i.e. [ghashash]. [Ghashash] is originally a standard word; however the form differs and the meaning is the same when the word is colloqualized through the process of derivation. From the researcher's observation to BD, this variant represents the language of childhood. Approximately, all children use this word especially in playing games when they start to cheat and thus they utter this word against each other. Figure 4.22 clarifies this distribution.

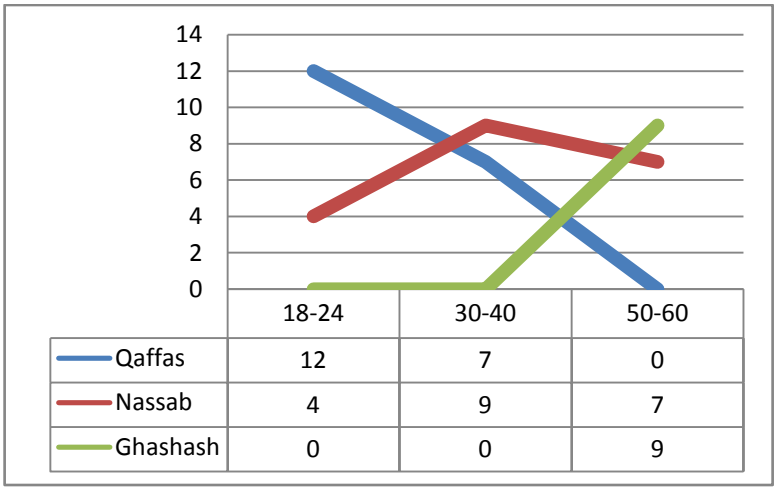


Figure 4. 22: The Choice of [Qaffas], [Nasab] and [Ghashash] According to Age Groups

The distribution of the three variants is going to be identified through correlation and regression so that we can understand the relationship between these variants and the speech community of Baghdad. Correlation shows strong relationship between the independent variable age and [qaffas]. The age variable was positively correlated with [qaffas], r= 0.626, p< 0.001. A positive correlation coefficient of 0.626

indicates that 62% of the time, when the number of informants increases, the choice of the linguistic item increases as well. The level of significance indicates that the correlation is statistically significant (refer to Appendix D).

As shown in correlation tables, weak relationship was found between the gender of the informant and [qaffas]. It was calculated that $r = 0.398$, significant at $p<0.05$. However, when excluding the effect of gender in partial correlation the value of r increases, r= -0.482 which has mild affect and the sign is positive which means it is an important factor. In the Model Summary table, the R value is 0.894, R^2 =0.681. In this case, 68% of the variant can be explained by age and gender which is good enough to explain the variance. The ANOVA table indicates that the statistical significance of the regression model is less than 0.001 and indicates that the model applied is significantly strong enough in predicting the outcome variable. It is very clear that both the constant and age contribute significantly to the model. On the other hand, very weak contribution can be made from the gender variable. The gender (b=-0.398) has weak significance at $p<0.05$. At the significance of $p<0.001$, it is seen that constant and age have high effect on the choice of the word qaffas.

Since the independent variable gender has weak effect on the choice of the word qaffas, it is necessary to understand which gender has that effect on the linguistic choice of [qaffas]. Appendix E provides the results obtained from the independent t-test and Levine's test for equality of variances. The table shows that $t(46) = 2.119$, $P < 0.05$. It is clear that the mean values of both genders are different where

the mean value of male equals 0.54 whereas for female the mean value equals 0.25. The Tables in Appendix E show that there is little difference between the variances. Since variances are approximately equal, F test = 6.990 is only significant at $p< 0.05$ and the effect is from the males on the choice of [qaffas]. Figure 4.23 shows the percentages of the linguistic choice by both genders. It is clear that [qaffas] is a choice of both categories with the percentage of 67% for males and 33% for females. This indicates that gender is an important social factor in the choice of the new word.

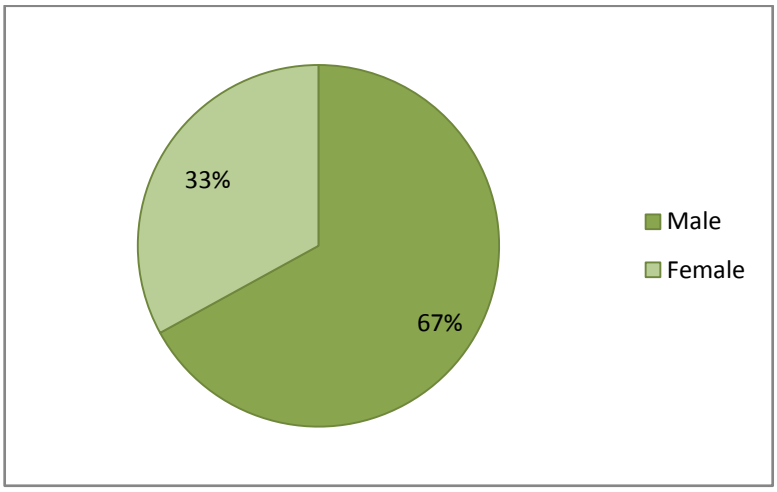


Figure 4. 23: The Percentage of Choosing [Qaffas] According to Gender

A one way ANOVA test shows that there is strong effect from age groups on the choice of the word and it is significant at $p<0.001$ as shown in (Appendix F). Age has an effect; the effect is from group 1 with 3, 2 with 3, while there is no effect from group 1 with 2.

Both correlation and regression equations show no effect of gender and age on the lexical choice of [nasab] but these non-linguistic factors have the most effect on the

lexical choice of [ghashash]. Similarly with [qaffas], age has the most effect on the choice of this variant and gender has minor effect (refer to Appendices D, E, and F). It was age group 3 (50-60) with 2 (30-40) and 3 with 1 (18-24) which affect the choice.

4.3.3.1 Discussion of Variable 3

The third variable explored in this study is (qaffas) which has three variants [qaffas], [nassab] and [ghashash]. It is found that [qaffas] is a male and female choice of the first age group. It is also the choice of both genders from the second age group. It is clear that none of the old male and female informants chose this variant. The females aged 30-40 showed the highest choice of the second variant [nassab] while the old females showed the least choice. None of the young male informants chose this variant and they were the old males who chose it. The third variant [ghashash] was limited to the choice of male and female of the ages 50-60 only and none of the other two age groups of both genders chose this variant which indicates that [ghashash] represents a former linguistic change introduced into Baghdadi community by young women, who are now old.

4.3.4 Data and Statistics for Variable 4

Two variants occur to reflect one meaning; that is, making audience relax, laugh and be far for moments from the stress and pressure of life. Although the two variants reflect one meaning; however, [tahshish] is much stronger than any other variant studied in this research and the reason might lie in the connection between this variant and the comic series continued on first Iraqi popular channels. Figure 4.24 shows the choice of the variant [tahshish] by males and females according to their

age groups. From the figure, it is clear that both young female and male groups aged 18-24 chose [tahshish] and only two out of eight female and male informants aged 50-60 chose this variant. It is also clear that the male 30-40 age group preferred the choice of [tahshish] more than the female group of the same age.

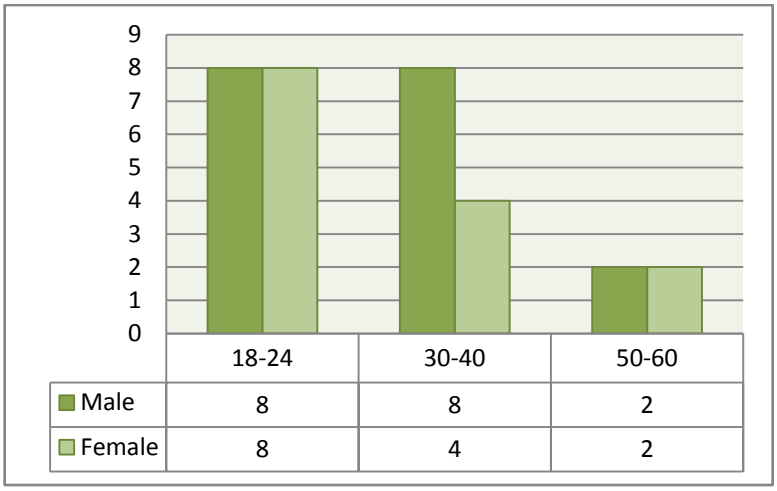


Figure 4. 24: The Choice of [Tahshish] According to Gender and Age

The second variant that covaries with [tahshish] is the [tasnif] variant which seems to be a speech marker of old males and females and some middle aged females as shown in Figure 4.25.

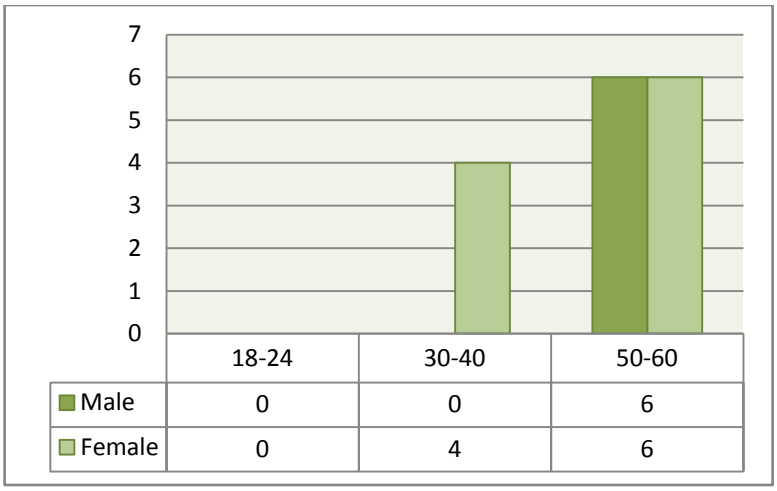


Figure 4. 25: The Choice of [Tasnif] According to Gender and Age

Combining both variants of the three age groups under study shows that for young informants (males and females) it is only one choice, i.e. [tahshish] as shown in Figure 4.26 below:

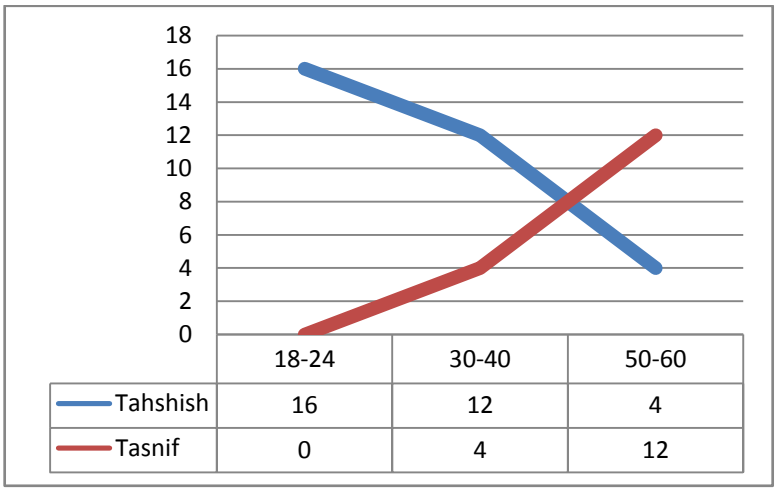


Figure 4. 26: The Choice of [Tahshish] According to Age Groups

The figures show the strong effect of age on this variable which is confirmed by the correlation and regression tables (refer to Appendix D). Tables show the effect of age on the choice of [tahshish]; however there was no effect from the gender of the

speaker. As expected, the age variable was positively correlated with [tahshish], r= 0.850, p< 0.001. A positive correlation coefficient of 0.850 indicates that 85% of the time, when the number of informants increases, the choice of the linguistic word tahshish increases as well. The level of significance indicates that the odds are less than 1 out of 1000 that this is a chance occurrence; therefore it is not a chance finding and that the correlation is statistically significant. Thus the null hypothesis is rejected. The value of r increases more when the effect of gender was excluded in the partial correlation, r=860. No significant relationship was found between the gender of the informant and [tahshish]. It was calculated that r = -0.177 and thus no significance obtained. The negative sign of the correlation might refer to an important point; however, the small value indicates no significance. The model table which represents the simple correlation and value of R indicates an excellent degree of regression, R=0.973. In this case, 75% of [tahshish] can be explained by a linear regression on the independent variable age which is a very good percentage. Undoubtedly, [tahshish] is a choice of both genders with the percentage of 56% for males and 44% for females.

A one way ANOVA test (refer to Appendix F) shows that there is an effect from age groups on the choice of the word and it is significant at p< 0.01 and p< 0.05. The Post hoc tests show that the effect is from age group 1 (18-24) with 3 (50-60), significant under 0.01 and age group 1 with 2 (30-40), significant under 0.05; while there is no effect from the age group 1 with 2. It is clear that informants at the age of 18-24 from both genders preferred the choice of this word; whereas the old

informants of both genders have the least percentage. The old have the least percentage of [tahshish] because they prefer the variant [tasnif]. In correlation, gender is not significant in effecting this variant since the two genders share the use of this variant and the effect comes from age. It is strongly and negatively correlated with [tasnif], r=- 650, $p<0.01$. Also the $R^2 = 0.453$ indicates that 45% this variant can explain variation (refer to Appendix D). The effect of age comes from group 1 with 3 significant at 0.01 and age group 2 with 3 significant only under 0.05 (refer to Appendix F).

4.3.4.1 Discussion of Variable 4

The fourth linguistic variable explored in this study was (tahshish). This variable shows two variants: [tahshish] and [tasnif]. The new word form [tahshish] has been found as an optimal choice for the two genders aged 18-24 along with the males aged 30-40. Then, the choice of this variant was decreased by both genders aged 50-60. The second variant [tasnif] showed that it was a preference for the old from both genders a long with the females from the second age group. It is choice that indicates that this variant was an innovation for those informants when they were young.

4.3.5 Data and Statistics for Variable 5

In this research, we found that the word kiki is not the only innovative lexical item that refers to males' fashion. There are two variants added to the augmentation of peoples' lexicon and therefore oblige them to choose one alternative rather than another. Figures 4.27, 4.28 and 4.29 show the choice of the three variants: [kiki], [style] and [modern] by males and females according to their age groups. In Figure

4.27, it is clear that the highest choice of [kiki] can be seen in the speech of the young male and female groups aged 18-24. On the contrary, the old male and female informants aged 50-60 have the least percentage. It is also clear that the word kiki has occupied a good space in the speech of male 30-40 age group.

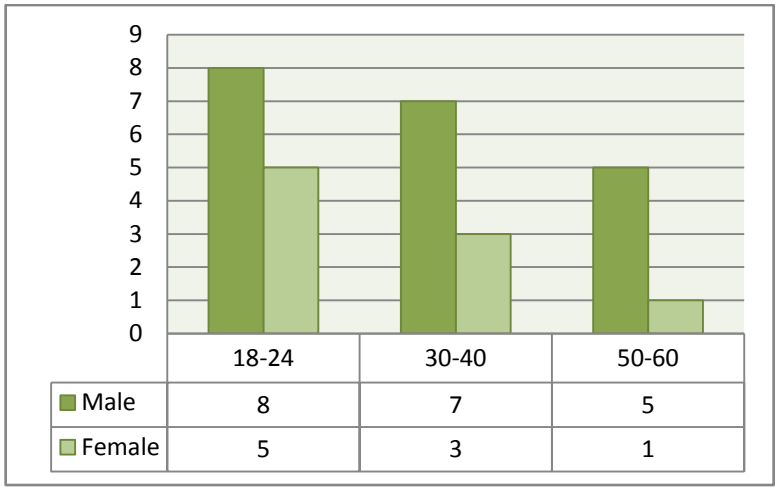


Figure 4. 27: The Choice of [Kiki] According to Gender and Age

The [style] variant can be seen in the choice of females especially the young; whereas the young males recorded no choice because they prefer only the variant [kiki]. A clear image can be seen in Figure 4.28 which shows the distribution of [style] across male and female age groups. Figure 4.29 shows that the [modern] variant is exclusively a female choice and no records registered for males; however, the young females do not seem to share this variant with their female counterparts. Look at the Figures below:

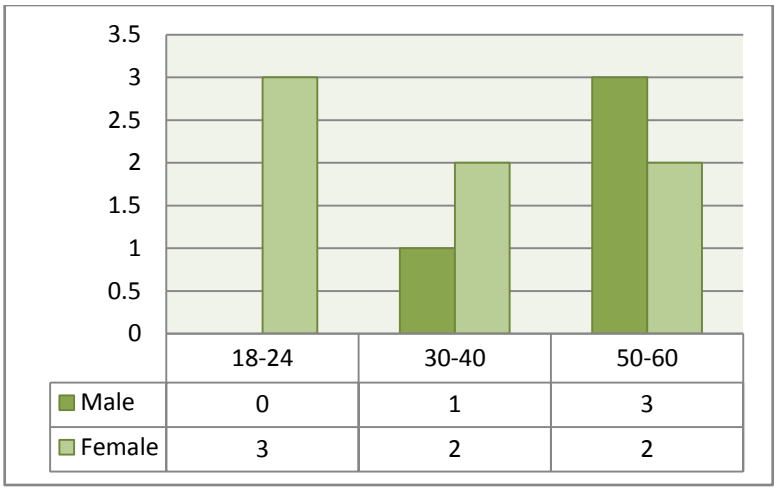


Figure 4. 28:The Choice of [Style] According to Gender and Age

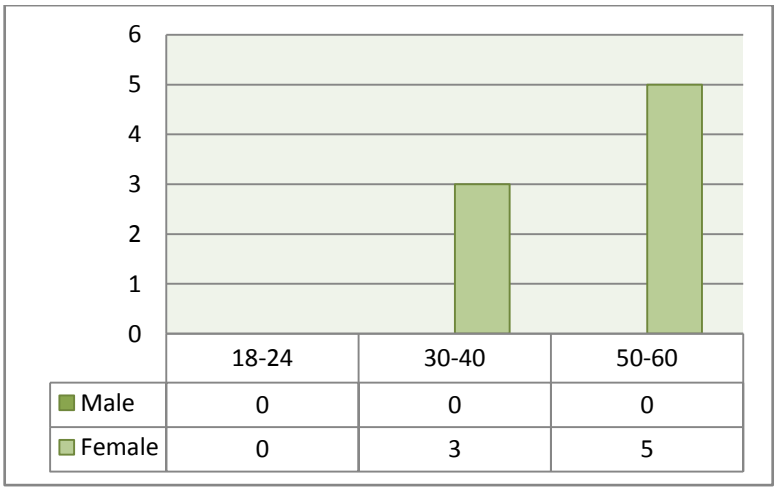


Figure 4. 29: The Choice of [Modern] According to Gender and Age

The combination of the three variants in the speech of all informants shows a new chart line that we are not used to see in the previous variables. The chart shows that the three variants are alternatives in the speech of the middle and old age groups. However, the young are more selective and only two variants covary in their choice. Figure 4.30 gives a clear image of this distribution.

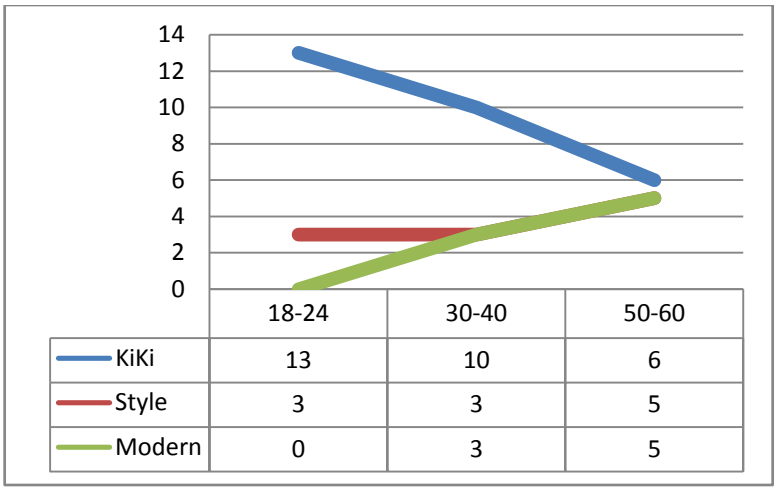


Figure 4. 30: The Choice of [Kiki], [Style] and [Modern] According to Age Groups

The nature of relationship between the independent variables (age and gender) and the dependent linguistic variable (kiki) and the level of significance obtained were shown in (Appendix D). It shows that there is strong correlation between the independent variable gender and the variant [kiki]. As expected, the gender variable was positively correlated with [kiki], r= 0.669, p< 0.001. A positive relationship was also found between the age of the informant and [kiki]. It was calculated that r = 0.465, p <0.01 and thus significance obtained. Tables show that the R value is 0.694, which represents the simple correlation and, therefore, indicates a good degree of correlation. The R^2 value indicates how much of the dependent variable, [kiki] can be explained by a linear regression on the independent variable, gender. In this case, 45% can be explained, which is good enough to explain the variation. They are males who affect the choice of this variant and they are the first age group that has the most effect (refer to Appendices E and F). Undoubtedly, [kiki] is a male choice with the percentage of 69%. On the other hand, the percentage of 31% does not mean that this word is not a female preference. However the difference between the

two sexes is clear. Figure 4.31 shows the percentages of the linguistic choice of kiki by both genders.

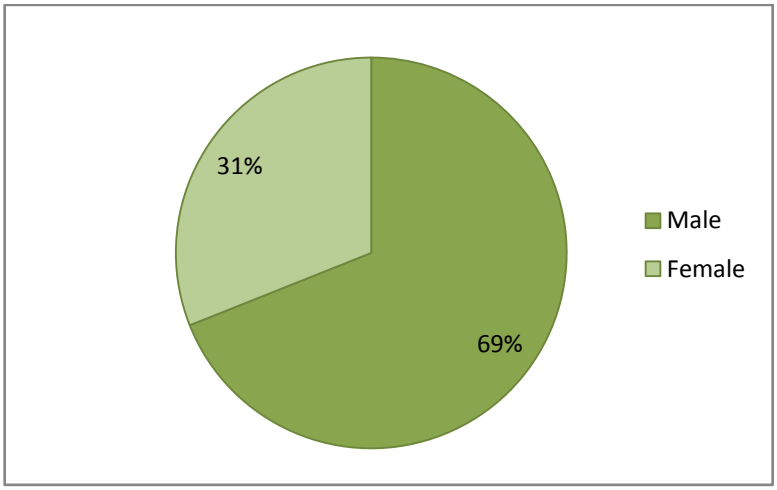


Figure 4. 31: The Percentage of Choosing [Kiki] According to Gender

The second variant [style] shows no significance obtained with the two social factors (gender and age) and therefore the choice of this variant might be attributed to other social and/or psychological reasons. On the other hand, gender has significant effect on the choice of [modern], $r=0.447$, $p<0.01$. The t-tests show that they are females who affect that choice the most as shown in Appendices E.

4.3.5.1 Discussion of Variable 5

Interesting results have been found when analyzing the variable (kiki). This variable showed that when there was lexical borrowing with phonetic realization, the other alternatives accompanying that variant were also borrowed words. The (kiki) has three variants: [kiki], [modern] and [style]. The variant [kiki] showed that there was male over female preference. It was a male choice starting with the highest choice by the first age group and ending with the old age group. The females showed the

same pattern in their choice of the word. The variant [style] was a female choice showing the highest values in the choice of young females and lesser choice by other female groups. An opposite pattern occurred in males' choice staring with more use of this variant of old age group and no choice occurred in the young males. The third variant [modern] showed that it was a female choice of the ages 30-40 and 50-60 with the highest choice by the latter and no choice was made by the young females.

4.3.6 Data and Statistics for Variable 6

Three lexical items occur in the speech of informants as variants of the (hata) variable: [hata], [jamila] and [hilwa]. These forms all refer to the same meaning; that is the beauty of a woman. However, [hata] is a new form which has no origin in SA nor does it have any meaning in colloquial Arabic. [Jamila], on the other hand, is a standard form which is used mostly by educated in formal settings. [Hilwa] is a colloquial form used by the majority of Iraqis along with millions of Arabs in Egypt, Levantine, Gulf and Morocco. However, [jamila] is also widely used by other dialects limited to those educated people. Figure 4.32 shows the choice of [hata] by males and females according to their age groups. From the figure, it is clear that none of the females of all age groups chose the new word. It is also clear that the male 30-40 and 50-69 age groups did not prefer the choice of Hata. In addition, seven informants of the young male 18-24 age group chose Hata. Undoubtedly, Hata is a choice of only young males.

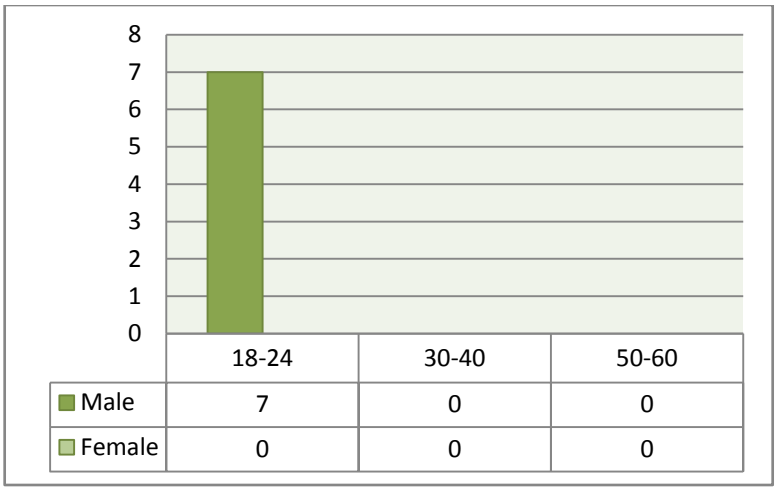


Figure 4. 32: The Choice of [Hata] According to Gender and Age

The choice of the variants [jamila] and [hilwa] seems to coexist in the speech of the middle and old age groups of both genders. These groups share both variants: the standard and the colloquial. Figures 4.33 and 4.34 represent the distribution of these variants which show that the young females prefer the colloquial choice most often.

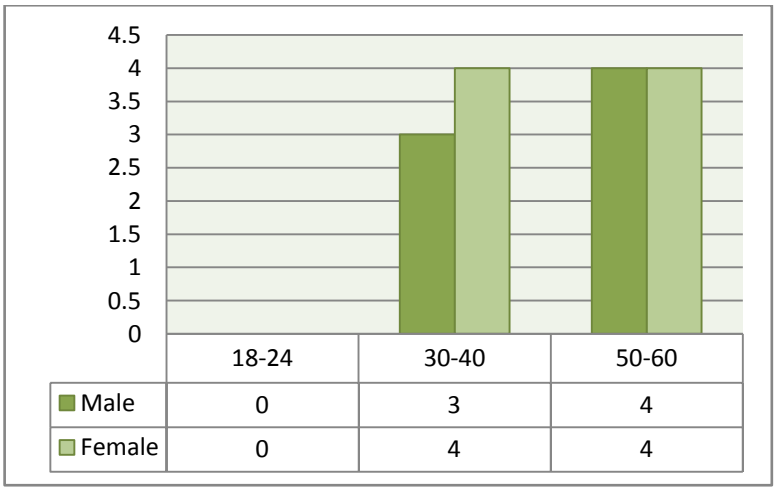


Figure 4. 33: The Choice of [Jamila] According to Gender and Age

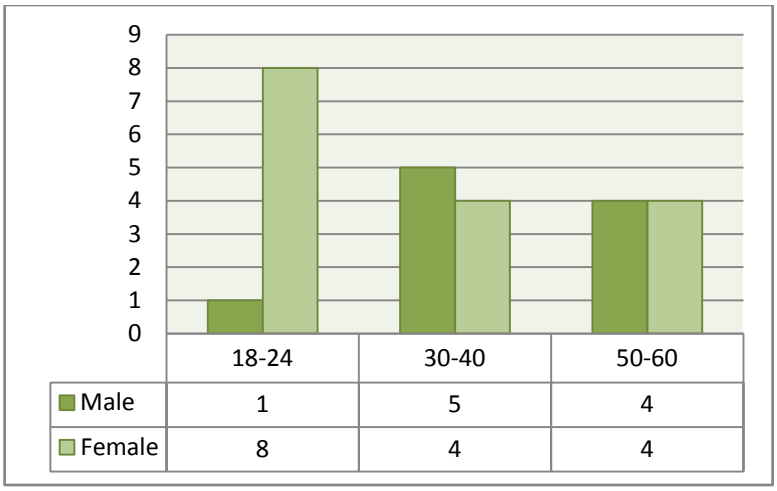


Figure 4. 34: The Choice of [Hilwa] According to Gender and Age

The line chart in Figure 4.35 shows that it is the colloquial variant [hilwa] which is mostly chosen by all informants, especially the young and middle aged groups and to a lesser degree the old group. The most important point to note here is that [hata] is the choice of young males only and [jamila] is shared by second and third age groups. Look at the following Figure:

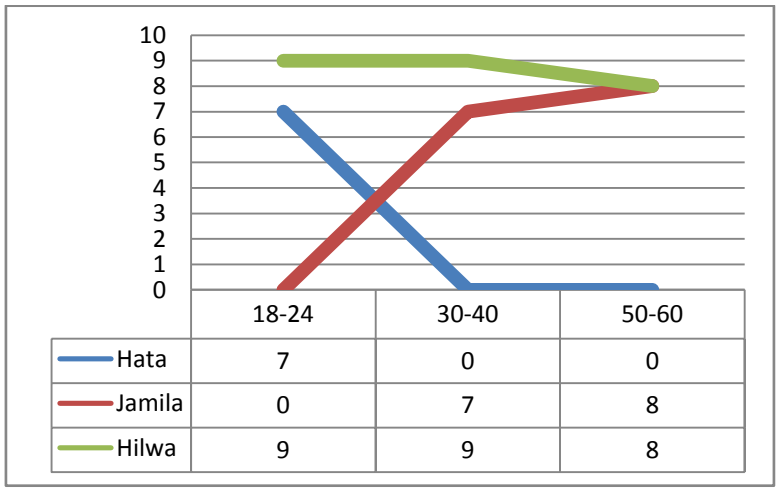


Figure 4. 35: The Choice of [Hata], [Jamila] and [Hilwa] According to Age Groups

The Pearson correlation coefficient values (refer to Appendix D) show that there is high effect from age on the choice of [hata] and [jamila], yet no effect from age on [hilwa]. It also shows that gender is not an important factor which is unexpected result. The age variable was positively correlated with the word [hata], r= 0.547, p< 0.01 and [jamila], r=.440, p<0.01. A positive correlation coefficient of 0.547 and 0.440 indicates that 54% and 44% of the time, when the number of informants increases, the choice of the linguistic variants [hata] and [jamila] increases as well. The level of significance indicates that the odds are less than 1 out of 100 that this is a chance occurrence; therefore it is not a chance finding and that the correlation is statistically significant. Thus the null hypothesis is rejected.

The R^2 value indicates [hata] can be explained by a linear regression on the independent variable, age. In this case, 63% can be explained, which is very significant; whereas for [jamila], R^2 equals 60%. A one way ANOVA test shows that there are differences between [hata] groups, F is significant at p<0.01 as shown in Appendix F. The effect is from age group 1 (18-24) with 2 (30-40) and 1 with 3 (50-60). The same difference of age groups is repeated and is significant at 0.01for [jamila] variant. It is clear that male informants at the age of 18-24 preferred the choice of this [hata], yet [jamila] was a choice of second and third age groups.

4.3.6.1 Discussion of Variable 6

The findings showed that the variant [hata] was a choice of young males only and no other group whether male or female has chosen this new innovative form of word. Instead, the other age groups of both genders varied in their choice between the local

variant [hilwa] and the standard one [jamila]. Approximately, half of the informants (males and females of the second and third age groups) chose the standard variant [jamila]. The other half of informants chose the local word [hilwa] a long with young females who showed the highest choice of this variant. According to the above results, the new form is a young male innovation whereas their female counterparts preferred the local variant [hilwa]. The other age groups from both genders swing in their choice between the standard and the local. Thus, young males are leading an innovation towards the non standard form of Baghdadi dialect.

4.3.7 Data and Statistics for Variable 7

It is important to note that words pertaining to religion are invariably found to be bound to the Standard Arabic forms as they represent sanctity and tradition. Although [ahsant] is widely used by teachers in schools to praise students' well done homework, it is a word that reflects the idea of being religious. After 2003 with the wide appearance of religion men, this word becomes a choice of many people in their daily conversation.

In order to understand the association between this variant and BSC, correlation and regression equations were performed. First, let's have a look at the distribution of this variant and the other variants that covary to give the same meaning which are shown in Figures 4.36, 4.37 and 4.38. Figure 4.36 shows the choice of [ahsant] by males and females according to their age groups. From the figure, it is clear that none of the male and female groups aged 18-24 chose this variant. It is also clear that the same number of informants (four out of eight) of male 30-40 and 50-60 age

groups preferred the choice of the standard Arabic word [ahsant]. Generally, none of the female age groups preferred the choice of this word. Look at the figure below:

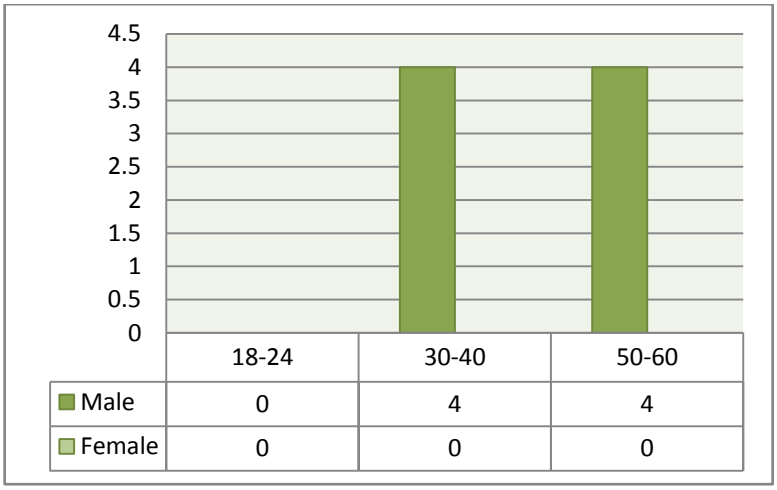


Figure 4. 36: The Choice of [Ahsant] According to Gender and Age

Another variant is the standard word [jayyid] which was a choice of all the young males in our sample. [Jayyid] is also a standard word that is mostly used by teachers in school to remark whether the homework done or the scores of an exam is excellent, very good or good [jayyid]. In daily speech, it is very rare to hear this word in an informal situation, especially by young people. Therefore, it is unexpected result to find that it was a choice for young males. The distribution of this variant is shown in Figure 4.37.

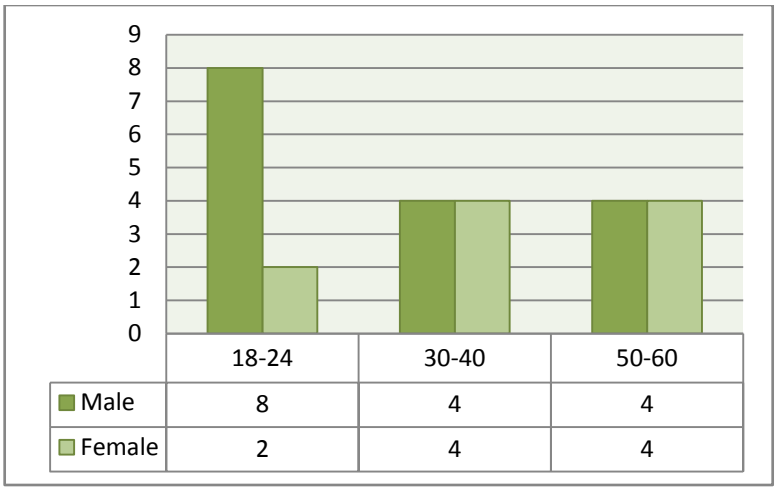


Figure 4. 37: The Choice of [Jayyid] According to Gender and Age

The third variant is the colloquial word [afya] which seems to hold a feminine characteristic because no male from any age group has chosen this variant. The distribution of this variant is shown in Figure 4.38 below:

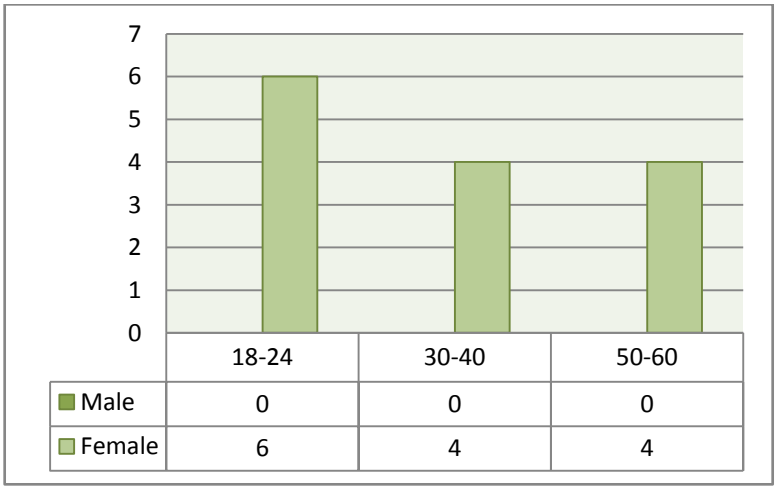


Figure 4. 38: The Choice of [Afya] According to Gender and Age

Figure 4.39 gives a clear image about the distribution of the three variants according to their age groups. First it is obvious that [jayyid] and [afya] show no variation across generations. Second, [ahsant] exhibit little variation which can be seen in the

distance between age group 1 with age group 3; that is the distance between the young and the old informants.

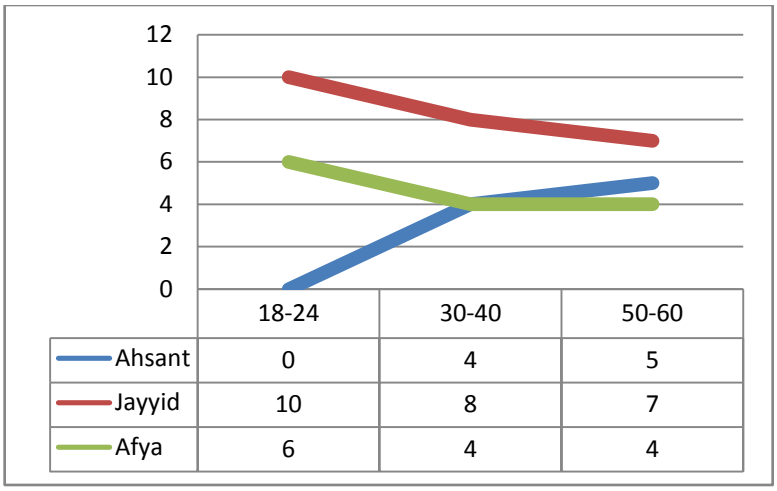


Figure 4. 39: The Choice of [Ahsant], [Jayyid] and [Afya] According to Age Groups

Not only [jayyid] shows no variation across generations but also it shows no variation across genders which is clarified in the tables of correlations and regressions (refer to Appendix D). On the other hand, there is strong correlation between the independent variable gender and the linguistic variants [ahsant] and [afya]. As expected, the gender variable was negatively correlated with the word [ahsant], r= -0.459, p< 0.001. A negative correlation coefficient of -0.459 indicates that 46% of the time, when the number of informants increases, the choice of the linguistic word [ahsant] decreases. Gender was positively correlated with the word [afya]], r= 0.578, p= 0.000. A positive correlation coefficient of 0.578 indicates that 58% of the time, when the number of informants increases, the choice of the [afya] increases as well. There is also little significance obtained from the effect of age on [ahsant] but only under 0.05.

Since the independent variable gender has the most effect on the choice of the word [ahsant] and [afya], it is important to understand the differences between males and females in their effect on the choice of the words. The independent t-test and Levine's test for equality of variances provide the results. For [ahsant], t (46) = -3.616, P < 0.001. Appendix E shows the mean values of both males and females. It is clear that the mean values of both genders are different where the mean value of male equals 0.33 whereas for female the mean value equals 0.00. Since variances are not equal, F test = 184.000 is significant at p< 0.01. There are therefore differences between males and females, and the effect is from the males on the choice of [ahsant]. The t-test for equality of means show that t (23.000) =3.391, p, 0.001. A result indicates that males and females are different and they are males who affect the linguistic choice. For the variant [afya], they are females not males who affect the choice of this variant. Finally, it was the age group one with three which shows variation in the choice of [ahsant] (refer to Appendix F).

4.3.7.1 Discussion of Variable 7

It was found that the variable (ahsant) was a choice of males from the middle and old age groups. The young male informants showed no choice of this variant a long with all females. These groups vary in their choice to express the same meaning. Some chose the standard variant [jayyid]; others chose [afya]. The variant [jayyid] was found in the speech of young males and this variant appeared to decrease in the choice of the two genders from the middle and old age groups. In addition, the young females showed less choice of this variant than others. This can be explained because young females preferred the choice of the local word [afya]. This variant

was found to be a female preference since no choice was found for males from all age groups.

4.3.8 Data and Statistics for Variable 8

Figure 4.40 shows the choice of [mu'mmam] by males and females according to their age groups. From the figure, it is clear that none of the young female group aged 18-24 chose the new word. In addition, two out of eight female informants aged 50-60 chose this word. Moreover, five females from the second age group chose this variant. It is also clear that the all male groups preferred this variant, especially male 30-40 and 50-60 age groups.

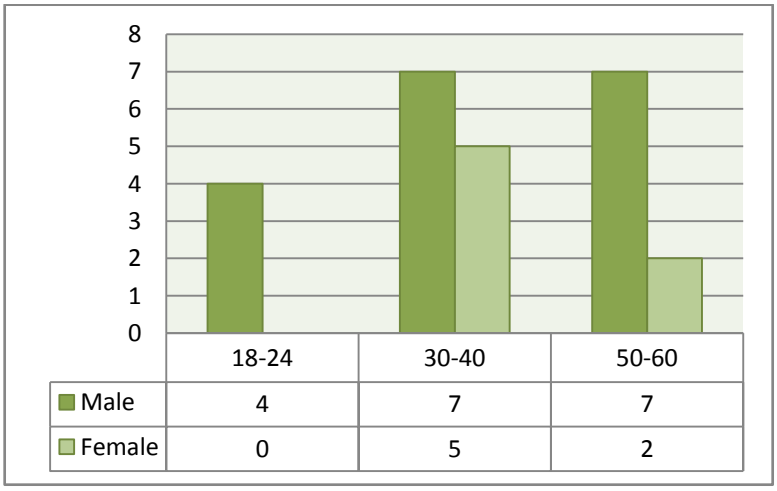


Figure 4. 40: The Choice of [Mu'mmam] According to Gender and Age

Another variant that seems to covary with [mu'mmam] is the [rajuldeen] variant which means 'a religion man'. Literally, these two words do not reflect the same meaning; however, what is of much importance what people really mean. All people make connection between a man wearing a turban and his being a man of religion. This of course would be reflected in peoples' choices of a particular word rather

than another. Figure 4.41 below shows the distribution of this variant. The Figure strongly suggests that this variant was a choice of some old females only. It might be said that this variant is an innovation introduced into the BSC by old females to show some prestige.

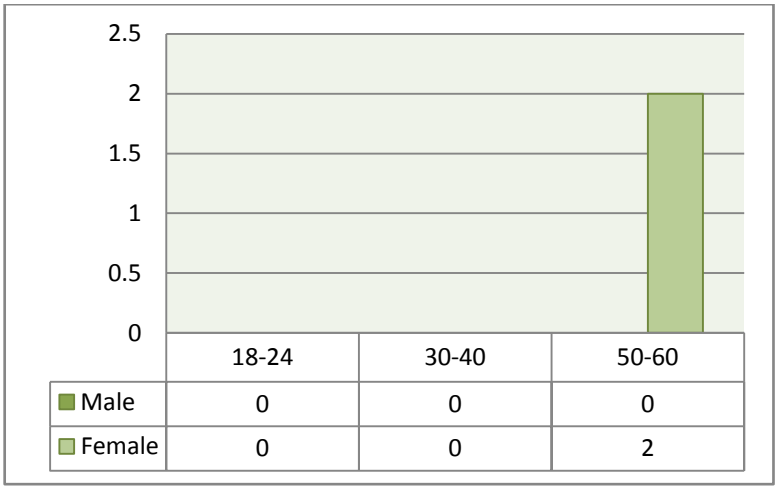


Figure 4. 41: The Choice of [Rajuldeen] According to Gender and Age

The third variant is a mix of two lexical items that anyone can be used according to the color of the turban. Figure 4.42 shows the distribution of the variant according to genders and the three age groups.

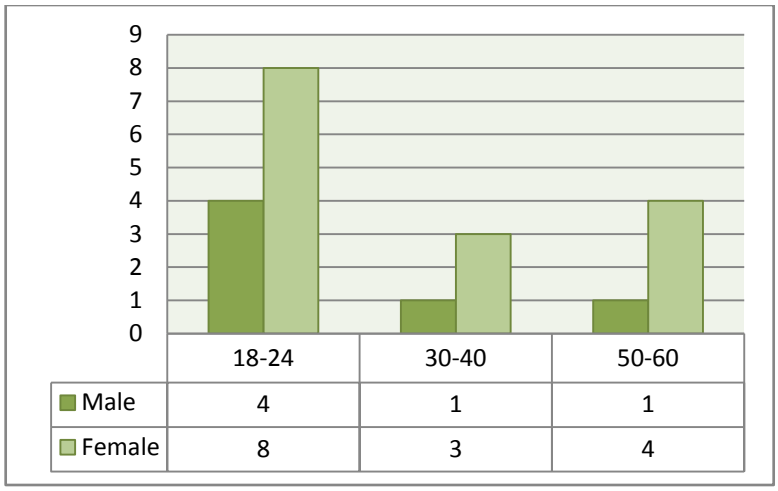


Figure 4. 42: The Choice of [Sheik/Sayid] According to Gender and Age

The Figure above shows that [sheik/sayid] is a female choice, especially young females. The choices of the three variants are combined in Figure 4.43 to get a clear idea about distribution across generations.

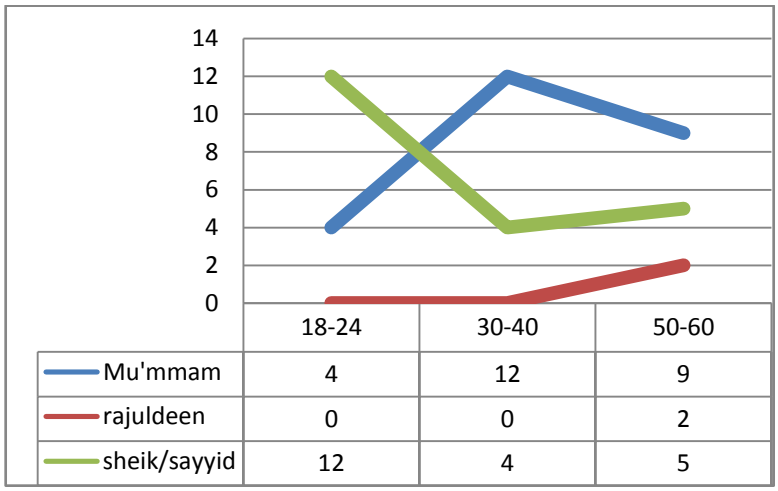


Figure 4. 43: The Choice of [Mu'mmam], [Rajuldeen] and [Sheik/Sayyid] According to Age Groups

Statistics show that there is strong correlation between the independent variable gender and [mu'mmam]. As expected, the gender variable was positively correlated

with the variable, r= 0.759, p< 0.01. Age also positively correlated with this variant but only under 0.05, r= 0.365. The gender and age variables also correlate positively with [sheik/sayyid], r= 0.678, p<0.01 for gender and r=0.389, p<0.05 for age. In addition, the variant [rajuldeen] gains no important value which is expected (refer to Appendix D). The Model Summary tables represent the simple correlation and, therefore, indicate a good degree of correlation. The R^2 value indicates that [mu'mmam] can be explained by a linear regression on the independent variables, gender and age. In this case, 58% can be explained, which is good enough to explain variance. The R^2 value indicates that [sheik/sayyid] can be explained by a linear regression, in this case, 47% can be explained, which is fair.

To understand the effect of gender as far as the choice of the words [mu'mmam] and [sheik/sayyid] is concerned, independent t-test and Levine's test for equality of variances were performed. Appendix E shows the mean values of both males and females. It is clear that the mean values of both genders are different and also there are differences between the variances. For [mu'mmam], there are differences between means and the effect is from the males not females. On the contrary, for [sheik/sayyid], the effect was from females not males. Figure 4.19 shows the percentages of the linguistic choice [mu'mmam] by both genders. Undoubtedly, [mu'mmam] is a male choice with the percentage of 72%. Moreover, the percentage of 28% shows that females also prefer the choice of this word.

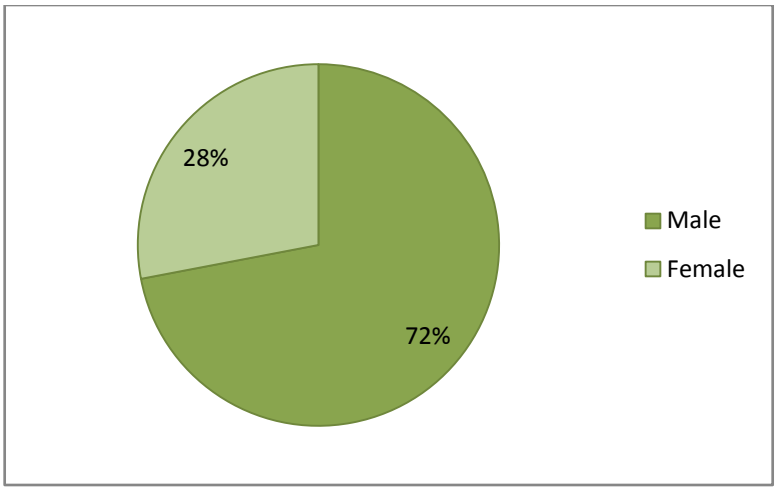


Figure 4. 44: The Percentage of Choosing [Mu'mmam] According to Gender

A one way ANOVA test (refer to Appendix F) shows that there is little effect from age groups on the choices of both [mu'mmam] and [sheik/sayyid]. The effect on the variants comes from the comparison between age group 1 with age group 2.

4.3.8.1 Discussion of Variable 8

Another interesting variable correlated with the gender and age of the informants is the variable (mu'mmam). It has been found that the variant [mu'mmam] was a male choice by both middle and old males. As far as females' choice is concerned, none of the young females chose this word. Moreover, the middle 30-40 age females chose this variant more than the old ones. A long with the choice of this variant, all females, especially from the first and second age groups chose the variant [rajuldeen] more than the third age group which shows that this variant was a female choice. However, this variant was chosen more by the first male age group more than the other male groups. The third variant [sheik/sayyid] has the least choice among other linguistic variants. Two informants only from the first female age

group and the second male age group chose this variant. In addition, there was only one informant from all other male and female groups chose this variant.

4.3.9 Data and Statistics for Variable 9

Once again, it is believed that words pertaining to religion are invariably found to be bound to the SA forms as they represent sanctity and tradition. Figure 4.45 shows the choice of the variable (mawlai) by males and females according to their age groups. It is clear that none of the young female group aged 18-24 chose this variant. In addition, two out of eight female informants aged 30-40 and 50-60 chose this variant. It is also clear that all male groups preferred this choice, especially the male 30-40 age groups.

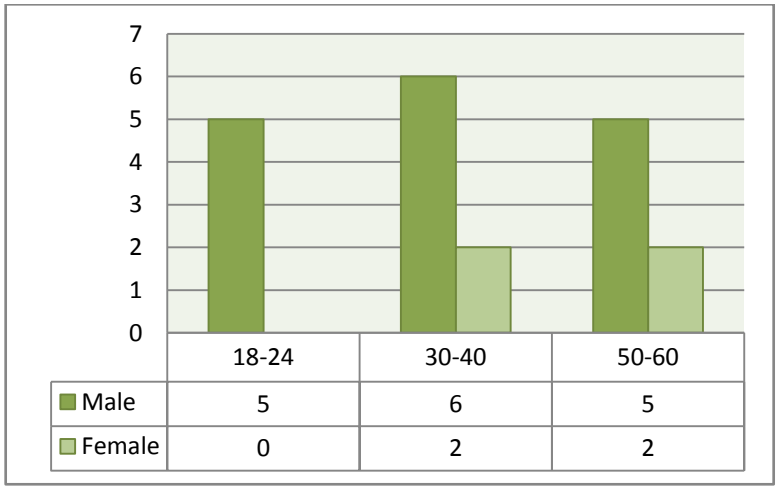


Figure 4. 45: The Choice of (Mawlai) According to Gender and Age

The Pearson correlation coefficient values show that, as expected, the gender variable was strongly correlated with the variable (mawlai), $r= 0.707$, $p< 0.001$. A positive correlation coefficient of 0.707 indicates that 71% of the time, when the number of informants increases, the choice of the linguistic word increases as well.

This value increases when the effect of age is excluded in the partial correlation, r= 0.710, p<0.001. Therefore, the null hypothesis is rejected. As shown in by statistics, no significant relationship was found between the age of the informant and the variable. The Model table (refer to Appendix D), which represents the simple correlation, shows the R^2 value. 59% of (mawlai) can be explained by a linear regression on the independent variable gender. The ANOVA table also shows that the model applied is significantly good enough in predicting the dependent variable where F=8.232, p=0.001. From the simple correlation performed, it is clear that the independent variable gender has the most effect on the choice of the word. The mean values of both males and females are different where the mean value of male equals 0.67, for female the mean value equals 0.17 (refer to Appendix E). Since variances are not equal, F test = 7.393 is significant at p< 0.01 and the effect is from the males. Undoubtedly, the variable (mawlai) is a male preference with the percentage of 80%. Nevertheless, a percentage of 20% for females is considered good enough to be explained and given reasons for this choice. Look at Figure 4.46 below:

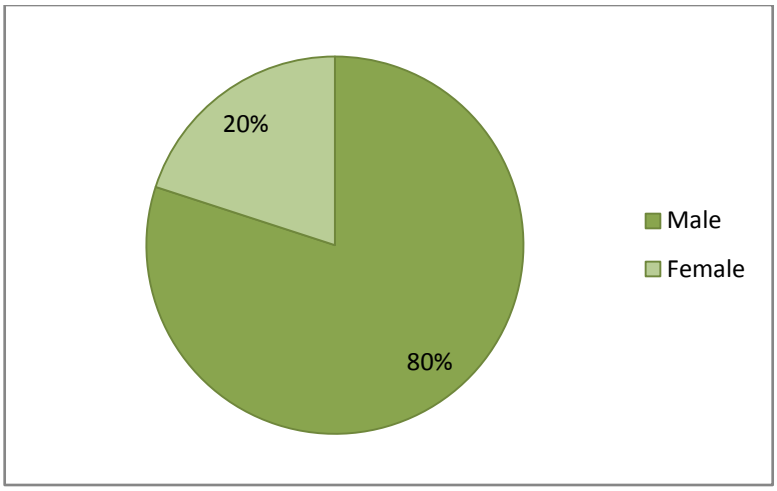


Figure 4. 46: The Percentage of Choosing [Mawlai] According to Gender

4.3.9.1 Discussion of Variable 9

(Mawlai) is the variable which shows the impact of religion upon people. With the percentage of 80%, it is clear that the variant [mawlai] is a male choice. And, only two informants from the second and third female groups chose this variant. The other choices that are reflecting similar meaning of this variant vary among a wide range of alternatives available in BD. This is the only variable through which informants provide a wide range of choices other than [mawlai]. However, there was no strong choice that can be used systematically by a particular group of informants. This can be explained statistically from a question asked in the interview about the purpose of choosing this word. Look at Figure 4.47:

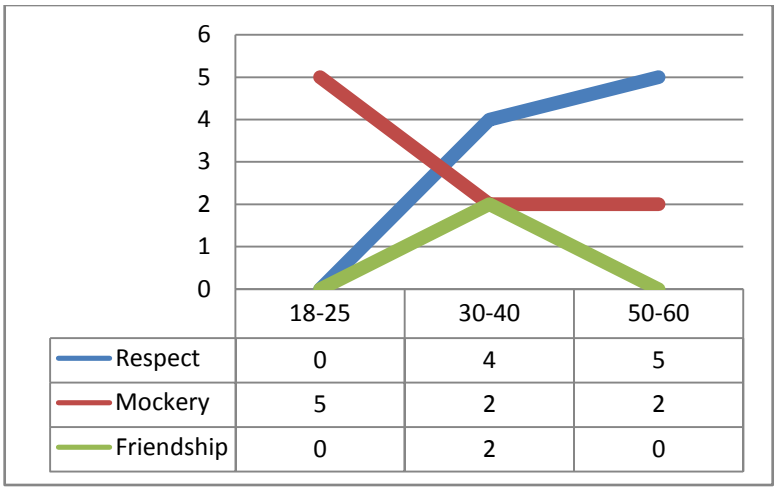


Figure 4. 47: The Purpose of Choosing [Mawlai] According to Age

From the above figure, it is clear that the young informants used [mawlai] for the purpose of making fun of somebody or some institutions which reflects a radical change in the original meaning of the word. This can be explained in relation to the sectarian religion conflicts among different Islamic parties in Iraq. Many of those young informants blamed religion men of the ruin of the country. However, the old informants chose this word to express respect which indicates that this age has different political and religious ideologies from the younger speakers. It is also clear that the middle aged speakers vary in their choice between using the word for the purpose of friendship (calling intimacy between friends), mockery (from the current situation at Iraq) or respect (keeping the original meaning of the word).

4.3.10 Data and Statistics for Variable 10

This variable exhibits three variants: [sahwa], [musallahin] and [isabat]. Figure 4.48 shows the choice of [sahwa] by males and females according to their age groups. From the figure, it is clear that the choice of the word increases along with the

increase of age for both sexes. However, the choice of the word by males is higher than that of females and by middle and old age groups more than the young age groups.

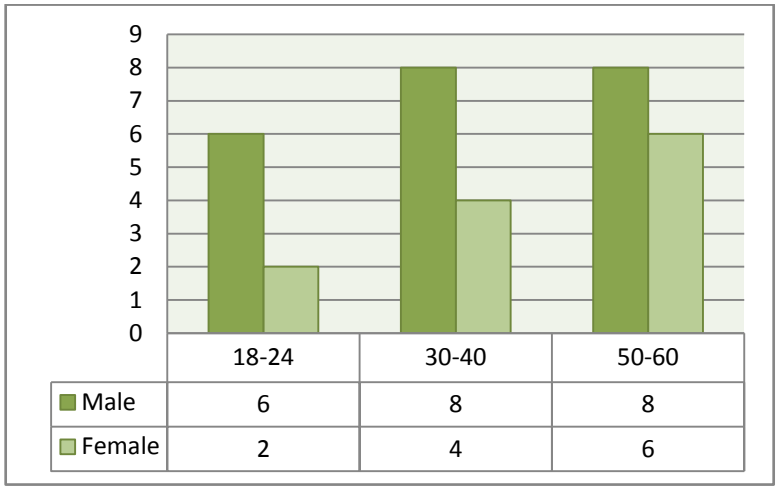


Figure 4. 48: The Choice of [Sahwa] According to Gender and Age

The choice of [musallahin] meaning 'armed people' is shown in Figure 4.49. The young females were the informants who chose this variant which seems to be a new innovation into BSC. Look at the Figure:

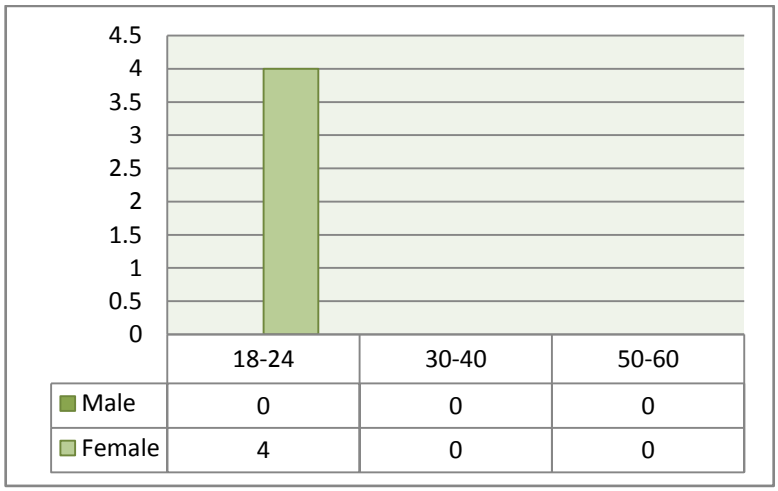


Figure 4. 49: The Choice of [Musallahin] According to Gender and Age

The distribution of the third variant [irhabiyin] meaning *terrorists* is shown in Figure 4.50.

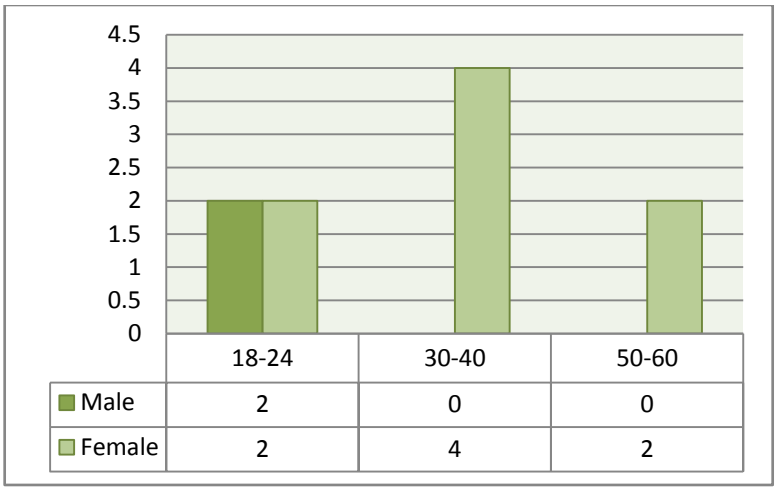


Figure 4. 50: The Choice of [Irhabiyin] According to Gender and Age

The Figure shows that this variant is preferred mostly by females across age groups, in particular the middle aged females. Two of the young males are the only informants who chose this variant. The distribution of the three variants across generations is represented in Figure 4.51 which shows no cross sections lines. It is clear that [sahwa] occupies a good place in people's speech and there are differences between the speech of the first and third age groups of this variant. [Musallahin] has got the least importance among informants and no variation occurred between the ages of informants. Adding to this, [irhabiyin] is in between the two variants and age shows it is insignificant effecting factor.

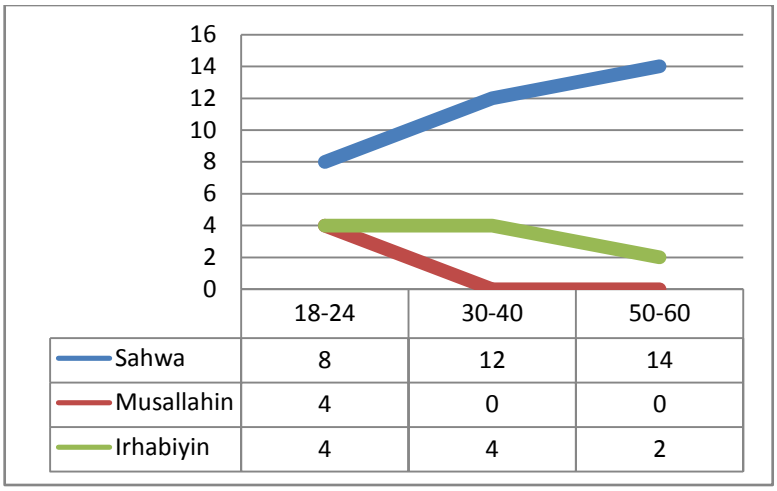


Figure 4. 51: The Choice of [Sahwa], [Musallahin] and [Irhabiyin] According to Age Groups

In order to investigate the nature of relationship between the independent variables (age and gender) and the dependent linguistic variable (sahwa) and to identify how much the dependent variable changes when the independent variables change, correlation equations were performed. The significance of correlation was tested in tables (refer to Appendix D). It shows the Pearson correlation coefficient values and the level of significance obtained. The tables show that there is strong correlation between the independent variable gender and [sahwa]. The gender variable was positively correlated with the variant Sahwa, r= -0.700, p< 0.01. Age also positively correlated, r=0.379, p<0.05. The R=0.769 and R^2 value=0.524 which indicates that 52% of the variable can be explained by the predictors. [Musallahin], on the other hand did not correlate significantly with either social variable. The R=0.277 and R^2 value=0.027 which indicates that 3% only of the variable can be explained by the predictors. Next, for [irhabiyin], tables of correlation and regression indicate that the regression model predicts the variable significantly well. This indicates the statistical significance of the correlation between gender and the variant, r=0.666, p<0.01. The

R=0.632 and R^2 value=0.411 which indicates that 41% of the variable can be explained by the predictors.

Appendix E provides the actual results from the independent t-test and Levine's test for equality of variances to see whether they are males or females who made the significant effect on the choice of [sahwa], t(degrees of freedom[df]) = t-value, P = significance level. In our case this would be: t (46) = 3.498, P < 0.01. Tables show the mean values of both males and females. It is clear that the mean values of both genders are different where the mean value of male equals 0.92 whereas for female the mean value equals 0.50. Since equal variances assumed, F test = 52.273 is significant at p< 0.001. There are therefore differences between males and females, and the effect is from the males on the choice of Sahwa. The t-test for variances not assumed is significant at 0.001. Once more time, this test provides the information that males have strong effect on the choice of the linguistic word Sahwa which is expected. Figure 4.52 shows the percentages of the linguistic choice Sahwa by both genders. Undoubtedly, Sahwa is a male choice with the percentage of 66%. In addition, the percentage of 34% shows that females also prefer the choice of this word.

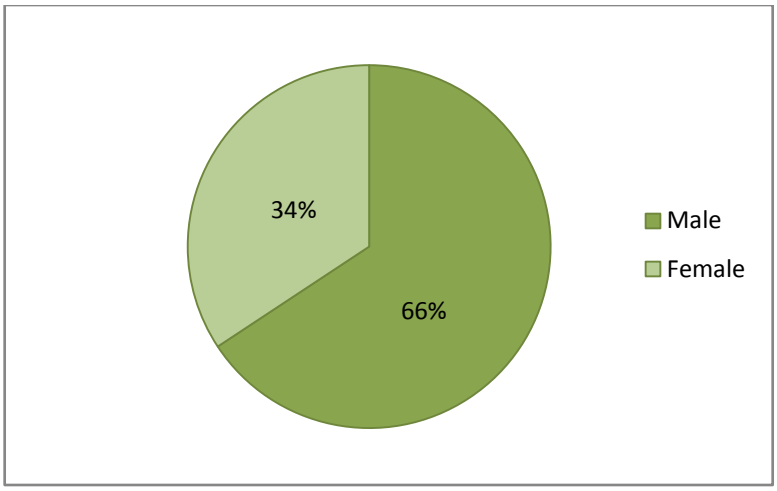


Figure 4. 52: The Percentage of Choosing [Sahwa] According to Gender

A one way ANOVA test shows that there are significant differences between age groups and thus there is effect from age variable on the choice of [sahwa] where F=3.000, p=0.009 (refer to Appendix F).Therefore, the effect is from group 1 (18-24) with 3 (50-60).

4.3.10.1 Discussion of Variable 10

Once again, [sahwa] was a male choice over females. All male groups chose the variant, especially the second and third ages. As far as the choice of females is concerned, it was found that there was gradual increase from the least choice by the young females up to the highest choice by the second and third female groups. However, females' choice was not limited to [sahwa] variant only but females tended to choose other alternatives such as the standard words [musallahin], *being armed* and [irhabiyin], *terrorists*. It was found that [musallahin] was a speech characteristic of young females only aged 18-24. In addition, [irhabiyin] was also found to be a female linguistic choice since it occurred in the choice of all females

especially those aged 30-40. Moreover, two young male informants chose this variant which shows that it was an effect from their female counterparts.

4.3.11 Data and Statistics for Variable 11

Militia is a phonetic and semantic borrowing from English. We expect that social factors will play a major role in reacting toward a borrowed item. In addition, we are interested to find out what other alternatives people choose to refer to the same meaning. Figure 4.53 is the only one which shows that the number of females choosing this variable is higher than males. Females across generations used the word Militia more than males, especially young females aged 18-24 which is unexpected result. It is clear, also, that males of the second age group used the least number of the English word Militia.

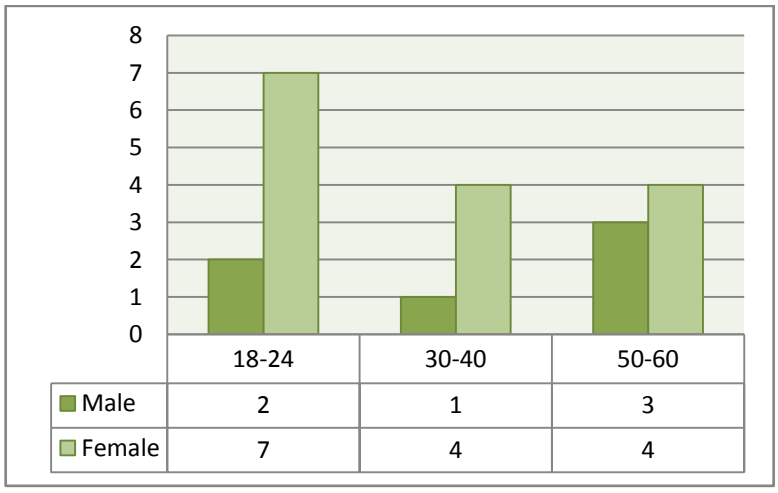


Figure 4. 53: The Choice of [Militia] According to Gender and Age

However, [militia] is not the only available variant that refers to those armed young people; other alternatives, such as [musallahin] – the actual translation of the word - and [isabat] – illegal armed groups of people - seem to covary in people's speech. It

is very clear from Figure 4.54 that the variant [musallahin] is an acceptable form for both genders across generations. However, the highest choice can be seen in the middle aged males and females and the least in the young informants. Look at the Figure below:

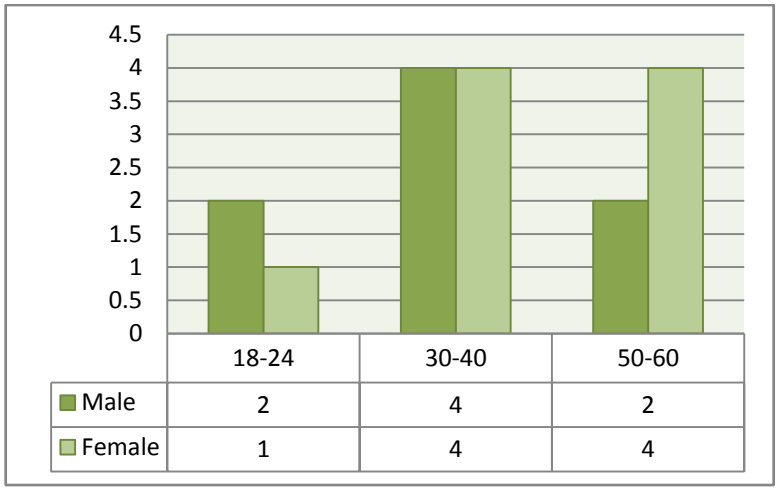


Figure 4. 54: The Choice of [Musallahin] According to Gender and Age

On the other hand, [isabat] is a male choice across age groups and no scores were registered for females. Figure 4.55 shows the distribution of this variant.

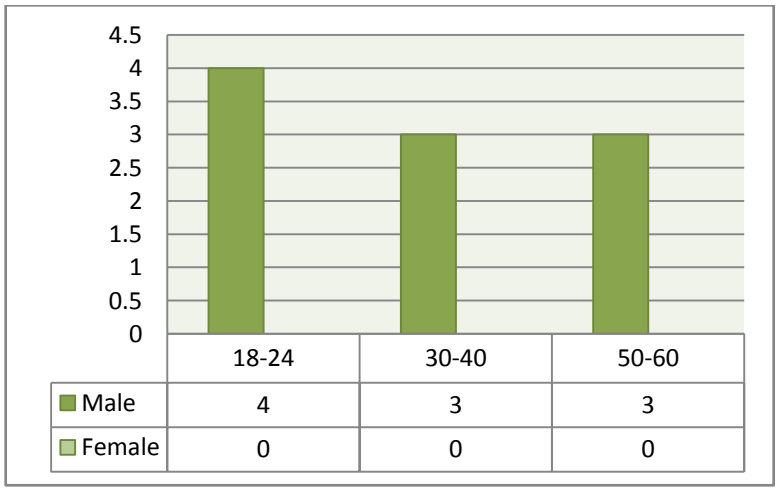
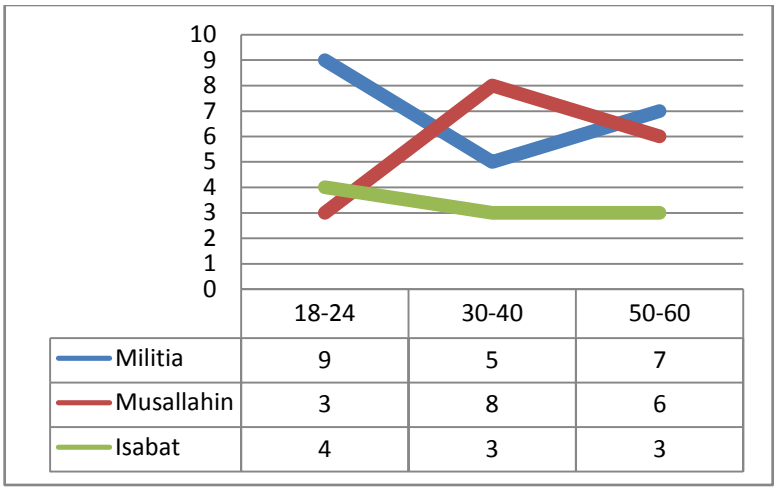


Figure 4. 55: The Choice of [Isabat] According to Gender and Age

Figure 4.56 shows that age is a significant factor that affects the choice of both [militia] and [musallahin]. Nevertheless, age is insignificant in the choice of [isabat].



	18-24	30-40	50-60
Militia	9	5	7
Musallahin	3	8	6
Isabat	4	3	3

Figure 4. 56: The Percentage of Choosing [Militia], [Musallahin] and [Isabat] According to Age Groups

[Militia] was investigated in order to identify how much it is changed when the independent variables change. The Pearson correlation coefficient values and the level of significance obtained show that, as expected, there is strong correlation between gender and [militia], r= 0.778, p<0.01 and the effect is from females (refer to Appendix E). The age was also positively correlated, r= 0.316, p< 0.05 and the effect is from age group 1 (18-24) with age group 2 (30-40) (refer to Appendix F).The R^2 value indicates that [militia], can be explained by a linear regression on the independent variables, gender and age. In this case, 55% can be explained (refer to Appendix D). The effect of gender can be also seen from the choice of the variant [isabat], r= 0.613, p< 0.01 and the effect is from males this time (refer to Appendix E). The effect of age can be seen also on the choice of the variant [musallahin], r= 0.363, p<0.05. However, the R and R^2 are not significant in that R^2 =0.028 which

means the Model of [musallahin] can explain only 3% of the variance (refer to Appendices D and F).

Figure 4.57 shows the percentages of the linguistic choice [militia] by both genders. Undoubtedly, [militia] is a female choice with the percentage of 71%.

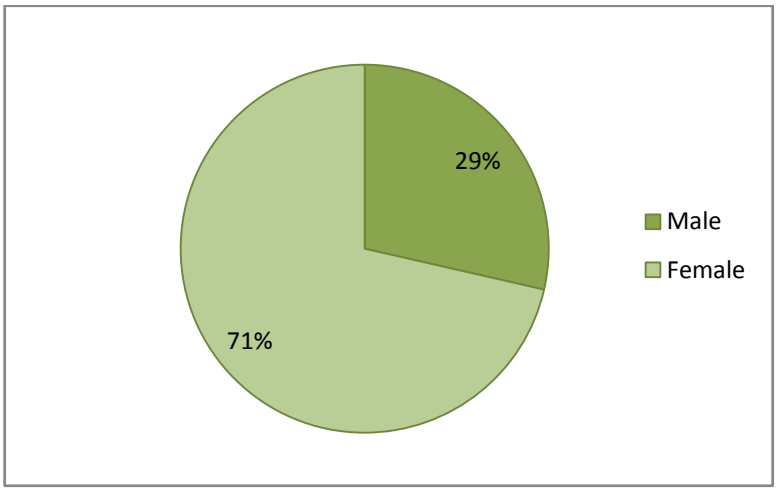


Figure 4. 57: The Percentage of Choosing [Militia] According to Gender

4.3.11.1 Discussion of Variable 11

The only linguistic variable that was a female preference is (militia). The variant [militia] was the choice of all females with the percentage of 71%. It is very clear that young females aged 18-24 chose more of this variant than other female groups. Moreover, they were old males who chose this variant more than other male groups. The least choice was by middle aged male group. This English word has two variants: the translation [musallahin] and a standard word [isabat]. The variant [musallahin] was the choice of both genders and all age groups especially the two

genders aged 30-40 and old females. However, the young females chose less of this variant than other groups which contradicts their choice of this variant with [sahwa]. In addition, males not females chose [isabat] to refer to the armed groups and it was a choice of all male informants staring with a high choice by young males.

In conclusion, the word *militia* which is an innovation introduced into Baghdadi community by educated females (especially the youngest) shows variation and gives birth to two other standard words: *musallahin* and *isabat*.

4.3.12 Data and Statistics for Variable 12

Figure 4.58 shows the choice of the word *irhab* meaning *terror* by males and females according to their age groups. From the figure, it is clear that this variable occupies a good percentage in the speech of both males and females of all age groups. The Figure shows that approximately little difference can be seen between groups of age; however the same number of the two genders keeps the variable. Although no results obtained from the equations performed; still this variable is interesting and significant. Because all speakers behave in the same way regarding the choice of (irhab), social factors do not seem to play a role in this type of choices. If social factors were to play a role, we would notice variation among speakers and groups of speakers.

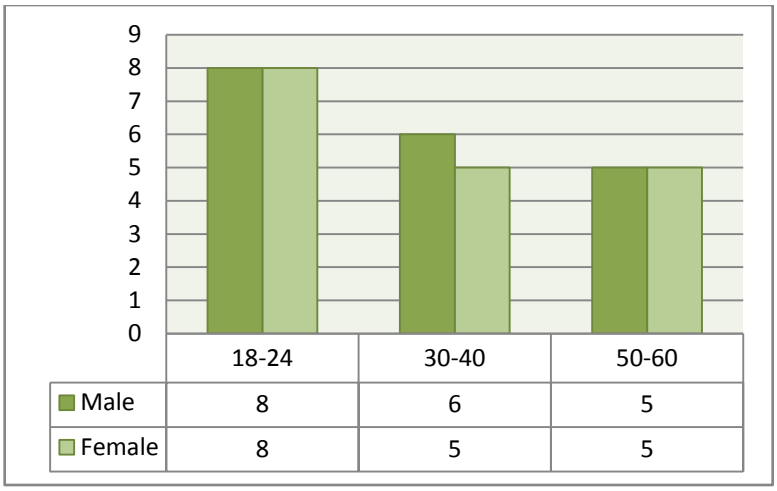


Figure 4. 58: The Choice of (Irhab) According to Age and Gender

The Pearson correlation coefficient value shows no level of significance. We understand from the values in Appendix D that neither age nor gender does have an effect on the choice of the word *irhab*. The table shows that there is no correlation between the independent variable gender and the linguistic variable (irhab). The gender variable was not correlated with the word, r= 0.275, p= 0.059. As shown in Appendix D, no significant relationship was found between the age of the informant and the variable Irhab. It was calculated that r = 0.056, p=0.705 and thus no significance obtained. The R^2 value indicates how much of the dependent variable (irhab), can be explained by a linear regression on the independent variables, age and gender. In this case, only 8% can be explained, which is not important.

4.3.12.1 Discussion of Variable 12

It was the variable (irhab) which showed no correlation with the independent social factors. To say no correlation means no variation occurred in the choice made by two genders and three age groups. All speakers behaved in the same way and no

other linguistic alternatives seem to play a role in reflecting the same meaning. Undoubtedly, (irhab) was a choice of all informants and the young male and female groups exhibit the highest choice among others. A few informants chose other words such as *ta'fiyya* 'sectarianism' and *ahzab* 'parties' but these do not follow a systematic pattern. Therefore, they are neglected in this study.

4.4 Summary

A correlational study is a quantitative method of research in which we have two or more variables from the same group of subjects trying to determine if there is a relationship (or covariation) between the two variables (a similarity between them, not a difference between their means). Although correlation cannot prove a causal relationship, it can be used for prediction, to support a theory, to measure test and reliability; regression is tool by which results of causal relationship can be proven. Data were explored before descriptive statistics were carried out to see the data normality. The t-test was conducted for gender variance, while post hoc tests were done on age groups. Later correlation and regression were applied on the variables to find their relationship: strength, direction and prediction.

Generally, it was found that gender is the most important social factor that affects the choice of new lexical items in the BSC. The second categorical variable has seen to show minor effects on the choice of words; however, age shows strong effect on the choice of words related to fashion and style. On the other hand, it was found that they were men not women who had the most effect when we compare their means using independent t-test tools. Moreover, they were young male and female aged 18-

24 who showed most effect when it comes to adopt a new linguistic variable comparing their mean values with other age groups (30-40 and 50-60) using post hoc tests.

Some of the tests show strong positive correlations; others show weak negative correlations. In all cases, the choice of one lexical item rather than another should be explained giving cognitive evidence which is going to be explained thoroughly in Chapter 5. In general, the hypothesis that there is correlation between new lexical items in Iraqi speech community and the two independent variables; i.e. age and gender proves to be valid and reliable.

CHAPTER FIVE
A COGNITIVE ANALYSIS

5.1 Introduction

The ways people choose words convey a great deal of information about themselves, their audience and the situations they are in. People's choice of words can hint at their social status, age, gender, education and other motives. That the words people use are diagnostic of their mental, social, and even physical state is not a new concept. Freud (1901) provided several compelling examples in his discussion of slips of the tongue. He pointed out that common errors in speech reflect people's deeper motives or fears. Philosopher Ricoeur (1976) argued that the ways people describe events define the meanings of the events and that these meanings help us keep our grasp on reality. Similar assumptions are implicit in much of the work in sociolinguistics (e.g., Eckert, 1999; Tannen, 1994). It should be emphasized therefore that lexical choice is not simply some kind of social environment represented by such *social variables* of gender and/or age in sociolinguistics. Rather, a lexical choice is a subjective *mental representation* and a dynamic model of choice categories stored in the mind of a speaker produced in a communicative situation. It is this mental property that controls the adequate choice of a word in a social setting. Hence, we need a mediating cognitive device that is able to represent the lexical choice processes and its situated variation. This is just one of the ways in which *cognition*, *society* and *lexical choice* are deeply and mutually integrated in interaction.

5.2 The Cognitive Approach

The main tenet of cognitive sociolinguistics is that there is assumed to be a relationship between language structure and language use and language use plays a defining role in shaping the grammar of individual speakers. Because of this, the grammar that results from such a relationship is acquired ‘bottom up’ from previous experience. Accordingly, many theories of mental categorization (Rosch, 1978; Smith & Medin, 1981) assumed that mental categories are represented by prototypes or exemplars. In other words, our personal experiences, as represented in the memory, consist of mental constructs: models of events and situations. Therefore, if different people are exposed to different category prototypes and exemplars, they are likely to have different rules for evaluating category membership.

People are members of various social groups, and we thus have an obvious link between the rules of groups and the rules of interaction (Halliday, 1973; Hudson, 1980; Lyons, 1981). A similar relationship is established in mental models, namely between personal beliefs and the socially shared beliefs of groups. Mental models, represented in the memory, make sure that people adapt their choice to the social group, so that it is socially appropriate (Bybee & Eddington, 2006). Because the knowledge, relations and beliefs of people are constantly changing, mental models need to be kept activated of working memory and hence represent numbers of aspects of the stored categories.

It is assumed that a choice is meaningful if people are able to construct a mental model for it. Such models account for the fact that different people, members of different communities and of different social groups, may have different interpretations of events. This implies that the choice of grammars in the minds of people may also be different. Therefore, besides the fundamental interface of personal mental models that account for specific linguistic behavior, a cognitive approach also accounts for social cognition, that is, the beliefs or social representations they share with others of their group or community.

Knowledge, *attitudes*, *values* and *ideologies* are different types of social representations. These social representations also play a role in the construction of personal models (Van Dijk, 2009). That is, socially shared knowledge and opinions may be instantiated in such models. In other words, models are also the interface of the individual and the social, and explain how group beliefs may affect personal beliefs and thus be expressed in linguistic behavior. Age and gender, which are typically defined for social groups, thus also appear as an instantiated property of individual's linguistic choice. And conversely, if the personal mental model of social events of an influential person is shared by others of a group or community, mental models may be generalized and abstracted from to form social representations such as knowledge, attitudes and ideologies.

5.3 Analyzing Lexical Variation

The general knowledge and ideologies of a social group are the kind of information that most directly affect the mental models, and hence the linguistic behavior of males and females. Together with the topics stored in the memory, the choices are best recalled and reproduced and hence may have the most obvious social and linguistic consequences (Van Dijk, 2009). Theoretically, this means that the generation of lexical meanings based on mental models is controlled by the various categories and contents of speech models.

There are often limitations of meaning for specific categories of people: constraints are defined for specific groups and their identities, roles and relationship. At this semantic level, this study examines, for instance, the choice of the words *hawasim*, *allas* and *qaffas* in the choice sample; a choice that has various implications that express the ideological perspective of the informants after the 2003 war: the action of some people who committed bad deeds was defined in negative terms, implying a form of morally or legally reprehensible or force, or abuse of social and political chaos. At the same time, the choice of these words implies that the majority of people are the victims of this moral and legal aggression.

The choice of the words *ahsant*, *mu'mmam* and *mawlai* contributes a lot to the religion organization in the society and according to which people derive their meanings. In more cognitive terms, this means that the choice of these words was affected by the formation of the mental model about religion and religion men after

2003. Similarly relevant is that the repeated use of these words that are typically associated with individual and religion, all profoundly ideological concepts related to the constitution and prevailing ideology of the political, religious and social impact.

In order to be able to qualify the legal action of terrorism in the starkly negative word of *irhab*, it needs to be shown that the lives and rights of individuals are being violated. The agreement on the choice of this word has several other functions, such as associating the translation of this word with the real actions that happen in every moment of peoples' life and thus preparing the negative evaluation of this word to reflect an idea saying that not only is the word being borrowed from another language but also the concepts of terrorism, crime and tyrant.

Negative and positive impressions were applied when choosing both *sahwa* and *militia*. These armed groups both violate and protect peoples' rights; therefore this reflection is very clear in the type of variants chosen to express the same meaning, i.e. *isabat, musallahin and irhabiyin*. Apart from polarizing the mental model being construed here, these words function as important premises in the overall augmentation of the lexicon being stored in the memory from personal experience. Again, such words not only contribute to the overall polarization of the conceptual structure of speech, but also to the formation of a biased, polarized model of the events, where people are starkly differentiated between the ordinary people and those criminals.

Similarly is the choice of words, such as *tahshish*, *kiki* and *hata* that is typically associated with individual's freedom: all social concepts related to the constitution and prevailing ideology of change

Adding to this, the masculine nature of these lexical items (referring to *men*) suggests that *Men*, especially or exclusively and no *women*, are involved in violence and death actions in Baghdad. Thus, innovating these words expresses a starkly conservative gender ideology by verbally excluding women from political life emphasizing that only *men* are involved in actions of violence, terror, insurgents, and protection. Masculine group dominance can only be implemented when group members actually engage in such derogating lexical choice as an instant of discrimination. It is supposed therefore that males are the innovators and producers of such lexical items. Gender is thus not merely abstract system of social inequality and dominance, but actually reach down in the forms of everyday life, namely through the beliefs, actions and choice of words of group members.

It has been assumed above that the relation between choice and society is not direct, but needs to be mediated by so-called 'mental models'(Van Dijk, 2008, 2009). That is, social structures — organizations, groups, gender, race, etc. — are phenomena that cannot be directly linked to word choice, as was previously the case in traditional sociolinguistics.

5.4 Analyzing Lexical Change

A usage-based model of grammar which accounts for variation assumes that the structure of the linguistic system is acquired bottom-up i.e. it is acquired gradually through encounters with actually occurring expressions; it is simply a matter of suggesting that the memories that are abstracted are associated, at some level of abstraction, with individual words. This is already the driving assumption of several usage-based theoretical frameworks (such as Pierrehumbert's, 2001 discussion of Exemplar Theory).

In generative phonological theory, the lexicon and the phonology are distinct and placed in separate modules of the grammar. The phonetic output of a lexical item is not stored in the lexicon but is arrived at once the lexical item has been retrieved from the lexicon and processed by the rules of the (phonological) grammar. This output is then fed to a phonetic implementation component which provides the acoustic targets with which the word should be realized in real speech (Pierrehumbert, 2001).

A usage-based model categorizes the actual tokens of linguistic experience. As words, phrases, or constructions are used they are mapped by speakers and hearers into identical existing representations if they are present, strengthening them. Such representations are called *exemplars* and the term *token* is reserved for the actual instances found in usage (Pierrehumbert, 2001). For the purposes of this mapping, identity involves both semantic and phonological features. If no identical exemplars

are available the token is evaluated for its degree of similarity to other exemplars and represented as (metaphorically) close to or distant from existing exemplars. In this way, clusters of related items are built up. Such models have been applied to general categorization in the psychology literature (Chandler, 2002), to phonetic representations (Pierrehumbert, 2001) and to lexical choice (Bybee, 2006).

In its simplest form, exemplar-based categorization takes place by comparing some incoming (new or innovated) item to similar exemplars stored in memory and then assigning this item to one of the stored exemplars, strengthening the item. This type of categorization can theoretically proceed with no permanently stored categories; rather an analogical set of similar exemplars is formed ad hoc for each item (Chandler, 2002). Because linguistic categories are so frequently used, it is plausible to assume that those categories exist in long-term memory. In an exemplar representation, all instances of use of a model in an individual's experience would contribute to the meaning of the model. That meaning can be arrived at only by considering the instances of use of these models. Moreover, the meaning resides in the exemplar clusters created by the user's experience. The exemplar model would simply list the lexical items, organized by similarity.

Research on lexical frequency has played a large part in discussions of usage-based models of language variation and change because frequency effects in language represent the most straightforward way to show the existence of a relationship between language structure and language use. A large proportion of the existing

literature on usage-based approaches in linguistics is concerned with demonstrating the effects of lexical frequency on the rate and direction of language change as this is one way to exhibit the existence of a relationship between language structure and language use.

It is expected that highly frequent words will be acquired faster by speakers than less frequent words (Pierrehumbert, 2001). Some research has attempted to explain frequency effects in language with the usage-based approach. (Bybee, 2007) Phillips (2006) and Labov (2006) are the most recent attempts to include variation in generative theoretical models. Research on the role of frequency effects especially in the spread of sound change therefore reveals something of a paradox: some researchers find little evidence for frequency effects in phonological change (Labov, 2006) while others (Bybee, 2007; Phillips, 2006) find very strong evidence for the importance of frequency effects in the spread of sound change and yet reach different conclusions regarding the nature and directionality of these effects. No consensus has yet emerged about how best to handle word frequency effects in sound change.

In this study, the exemplar model would simply list the lexical items, organized by similarity. In some categories, exemplars with higher token frequency appear to function as central members. The best fit with the data is a model in which exemplars are stored and accrue strength on the basis of frequency while also being organized into categories around a central exemplar.

The model that has been chosen in this study allows representations to change and expand as language is used because every token of experience has an impact on cognitive representation. Therefore, string of words that is used with some frequency would also be considered a construction even if its form, function or meaning is entirely different. This assumption is necessary to understand how constructions that do have unpredictable features arise: in order to assign a special pragmatic function to a string of words, or to register a phonological change, that string of words must constitute an item in cognitive storage, a representation to which changes in function or form can be attached (Bybee, 2006). This assumption follows from the premise that in addition to being units of storage, constructions are neuromotor processing units (Bybee, 2006). Their repetition by the language user helps to automate their production.

Indeed, this explanation is compatible with the distribution of data in this research. If a lexical item is considered a unit of storage in memory derived from personal experience and controlled by social parameters, then words such as *kiki* and *hata* that do not have predictable features in the mind of the speaker act as marginal exemplars keeping some distance with the central exemplars as a *well- dressed man* and a *beautiful woman* respectively. However, that distance varies according to different categories. For all females and middle and old males, the category of synonymous words includes some other words that keep the word *hata* far from the centre of the exemplar resisting and keeping it marginal. The mental explanation imposes that the pictures, memories and experiences do not match with a new word

like *hata*, but it makes sense of words such as *jamila* and *hilwa*. This cognitive realization proves that if a word is frequent, it can be observed in the choice of different people and being limited to a group of people is a sign of its fuzzy mental representation.

In addition, the model of *mawlai*, for example allows representations to change for different language users because every token of experience has an impact on cognitive representation. Therefore, the word was used with some frequency although its function and meaning is entirely different. The mental representation of this word for females shows respect and sanctity because the image stored in their memory is sacred. However, for males who practiced, witnessed and saw the consequences of the merger between politics and religion, the mental representation of this word shows *complain*. This, in turn, keeps certain mental experiences which show a contradictory representation of their female counterparts.

The same explanation is applied here on other variables, such as *sahwa*, *militia* and *mu'mmam*. In order to be produced by different people, they must be stored in memory in order for their frequency in experience to be registered. And hence, each category has a different experience stored in memory and registered different exemplars to convey the same meaning or to have the same referent.

The usage-based approach would explain why some words have been chosen by some speakers more than other words. Certain instances of units in the model that

were more frequent than others are represented by *mujrim* *'*criminal*'* and *irhabi* *'*terrorist*'*. The two lexical items occurred in more than one age group of both genders and were assumed to be robustly represented in linguistic memory. However, other exemplars such as *hawasim* and *allas* were rare.

Given exemplar representation, it is assumed that the high-frequency exemplars would be judged more acceptable by native speakers than the low-frequency ones. In addition, a large majority of the tokens are semantically related to these central exemplars, suggesting that they are created via analogy based on semantic properties. Most commonly these analogies are based on synonymy or near synonymy (for example, the standard word *jamila* 'beautiful' is closely related to the colloquial *hilwa*) but they may also be metaphorical, as when *hawasim* 'a particular thief' is used to refer to *harami*.

5.5 Discussing Frequency

It is first necessary to consider how best to measure lexical frequency in the data of this research. This is problematic because, as Bybee explains, "there is no one method for doing frequency research" (Bybee, 2007, p. 16). For spoken English, frequency could be calculated through an on-line database of English words. Often researchers interested in frequency effects take the frequency value of a particular lexical item from a large corpus such as 100 million word corpus of British English (BNC, 2009).

In Bybee's (2000) study of t/d deletion in American English, lexical frequency was divided into only two categories: *high frequency* and *low frequency* with a cut-point of 35 words per million. Bybee (2000) explained that this cut-point was chosen partly because a number in this range is often used in the psycholinguistics literature when measuring frequency effects. For Abramowicz (2007), lexical items occurring less than 3 times are rare, 3-10 times are relatively frequent and more than ten times are frequent. Using a small corpus of 11 speakers, Abramowicz made a 3-way distinction between *low*, *mid* and *high* frequency and coded frequency according to occurrence in his own data set.

Indeed, a database which might show word frequency in the Arabic variety spoken in Baghdad does not exist. One attempt of listing the frequency of written Arabic words was conducted by an organization called *Qamus* (dictionary) (Buckwalter, 2003) which relied upon words found in Google. However, the work of Qamus is not helpful to this research since it is far too limited because the meanings most of the words exhibit mismatch with the words under study. In addition, no other dictionary on local dialects is available to rely on. Therefore, this study is based on Al-Muhannadi's (1991) study on Qatari Arabic, where accordingly each word was assigned '+ frequent' for the occurrence of 20 times or more and '- frequent' for the occurrence of less than 20 times. This attempt at calculating frequency is thus limited as no scientific data was found to support it and this is the only analysis possible at this time.

The process of acquisition of the new forms will be noticed significantly if it examines the words chosen by the three age groups whose speech is characterized with variation. Then, Table 5.1 presents the number of occurrence of all words under study that showed variation (refer to Chap. 4) among age groups in comparison to less frequent words. Table 5.1 strongly suggests that the more frequent the word, the more likely to occur in the speech of varying speakers. This implies that frequently occurring words are acquired faster than non-frequent words.

In most of the varying speakers the word *irhab* shows the highest occurrence because it is the most frequent word (97 tokens). Even in informants whose variation is minor, this word seems to penetrate into their system because of its high frequency, as is the case of old people. The high frequency of this word explains the agreement of all age groups on this choice giving no space for another word to coexist with it and hence its acquisition was the fastest. However, showing no variation among categorical social groups, the word *irhab* gives no permanent analytical information to this study, yet it adds a useful explanation that is found to be compatible with bottom up approach that associates one's experiences with the grammatical system of the mind. In the analysis of frequency, the study depends mostly on the variation results (correlation and regression) obtained in Chapter 4.

Table 5.1 shows that the second most frequent word is *tahshish* (79 tokens of occurrences with [*tahshish*] and only 19 tokens of [tasnif]). Table 5.1 shows that this word occurs in high percentages in the choices of most informants, especially the

young males and females. Another frequent word that occurred in the speech of most informants is *qaffas* with the percentage of frequency 78% for [qaffas] and only 18% and 19% for [nasab] and [ghashash] respectively. It also occurs in the speech of most informants, especially the first and second male and female age groups.

More than one age group of both genders agree on a percentage of 56.75% for the choice of *hilwa* and only 16% for the new word *hata* and 27% for the standard word *jamila*. The word that is mostly used by females is *militia*. With the percentage of frequency of approximately 54%, it is considered frequent leaving a percentage of 23% to both *isabat* and *irhabiyin.*

The frequency of *mawlai* is 56.24%. Another word which has a high frequency in both lexical items: *hawasim* and *allas* is the word *mujrim* with a percentage of 49% and 46% respectively. *Kiki* is another word which has a percentage of frequency equals 45%, whereas the percentage of *modern* is 20% and *style* 30%. Another word that has a good percentage of frequency is *jayyid* with a frequency of 44% and only 18% for *ahsant* and 37% for *afya*. Another word that shows the impact of religion on people and seems to obtain good frequency is *mu'mmam* with a percentage of 43% and only 25% for *sheik/sayid* and 31% for *rajuldeen*. *Sahwa* is the final variable that shows frequency with a percentage of 42% for *sahwa*, 12% for *musallahin* and 33% for *irhabiyin*. From the table below, it is very clear that *hawasim* has the least percentage of frequency with 8% and *allas* also has a

percentage of frequency with 11%. Look at Figure 5.1 which shows the frequency and percentage of the lexical choices.

Table 5. 1: The Frequency and Percentage of the Lexical Choices

The Variables	1st choice	No. of tokens	2nd choice	No. of tokens	3rd choice	No. of tokens	4th choice	No. of tokens	Total of tokens	% to the total of tokens
Variable 1	hawasim	6 -	harami	32+	mujrim	37+	mutajawiz	33+	108	1st= 8% 2nd= 42.66% 3rd= 49.33% 4th = 43.21%
Variable 2	allas	9-	mujrim	36+	irhabi	33+			78	1st= 11.53% 2nd= 46.15% 3rd= 42.30%
Variable 3	qaffas	55+	nassab	13-	ghashash	12-			70	1st= 78.57% 2nd= 18.57% 3rd= 17.14%
Variable 4	tahshish	75+	tasnif	19 -					94	1st= 79.78% 2nd= 20.21%

Variable 5	kiki	18 $^{-}$	modern	10 $^{-}$	style	12 $^{-}$		40	1st= 45% 2nd= 25% 3rd= 30%
Variable 6	hata	12^{-}	jamila	20^{+}	hilwa	42 $^{+}$		74	1st= 16.21% 2nd= 27.02% 3rd= 56.75%
Variable 7	ahsant	10 $^{-}$	jayyid	24^{+}	afya	20^{+}		54	1st= 18.51% 2nd= 44.44% 3rd= 37.03%
Variable 8	mu'mmam	28 $^{+}$	Sheik sayid	16 $^{-}$	rajuldeen	20^{+}		64	1st= 43.75% 2nd= 25% 3rd= 31.25%
Variable 9	mawlai	31 $^{+}$						55	1st= 56.24%
Variable 10	sahwa	32 $^{+}$	musallahin	21^{+}	irhabiyin	23^{+}		76	1st= 42.10%

									2^{nd}= 27.63%
									3^{rd}= 30.26%
									1^{st}= 53.84%
Variable 11	militia	28^{+}	musallahin	12^{-}	isabat	12^{-}		52	2^{nd}= 23.07%
									3^{rd}= 23.07%
Variable 12	irhab	97^{+}						108	96.3%

It is worth noting here that a word like *irhab* ‘terror’ is related semantically and phonetically to other frequently occurring words like *irhabi* ‘terrorist carry the semantic meaning of ‘terrorism’; however, they are calculated independently from each other according to the meaning of the variant to which it belongs. The same applies to the variant *mujrim* which occurs twice with *hawasim* and *allas*. Finally, this chapter has shown that word frequency influences the acquisition process. Highly frequent words are acquired before less frequent words.

5.6 Cognitive, Social and Educational Development

Understanding how an individual learns is essential to understand how to teach. Generally, cognition refers to how people think, pay attention, remember, and learn. Language and cognition therefore are partners since child development. Cognitive abilities associated with memory, reasoning and thinking continue to emerge throughout childhood.

The theories of Jean Piaget (1977) and Lev Vygotsky (1978) have probably had the most influence on how young children learn. Although they worked at about the same time, they approached the topic from slightly different perspectives and emphasized different aspects of children's cognitive development. Piaget focused on the way an individual child acts upon objects in the environment in order to build mental models of the way the world works. Vygotsky looked more closely at the way children acquire knowledge through interaction with more experienced people, and at the role language plays in the process. Both viewed knowledge as something that individuals construct out of their own experience and reflect on self- practices

rather than something that is passively absorbed. For Piaget, the physical environment is important; for Vygotsky, the social environment is important.

Social cognition involves how people think about all things social, how people interpret other people's behavior and speech and how people adjust their own behavior and speech based on the reactions of others. There are not many conditions more social than the school environment. Researchers and teachers know well that children learn not only from direct instruction and performance, but also from their vicarious experiences, peer interaction, and even the media.

Social cognitive learning theory (SCLT) that emerged primarily from the work of Bandura (1977, 1986, 2001) is based on the fact that learning is a social event that occurs under a variety of circumstances, and results in a variety of outcomes. It is this interaction of social elements that successful teachers use to ensure that quality learning takes place. It is based on the idea that learning and the subsequent performance of certain behaviors are the result of the ongoing and reciprocal interaction between a person, the environment, and the already learned behavioral patterns of the individual and group (Bandura, 2001). Each learner, therefore, responds to instruction and modeling through the lens of these three elements. Bandura (2001) theorized that learning happens in a social environment and human behavior can be explained by triadic reciprocality: interactions between behaviors, the individual and the environment.

Because learning is inherently a social event, teachers can manipulate the classroom environment to promote the positive aspects of socialization and use them more proactively toward student learning. For example, teachers can set the classroom up as a learning community, incorporate acquisition and learning activities regularly, reinforce model behaviors by students, provide differentiated tasks, and support students as they recognize and acknowledge their own self-efficacy (Linares et al., 2005; Pajares, 1996; Paris & Paris, 2001; Schunk, 1998).

5.7 Word Frequency and Education

Frequency of word usage is an important criterion which has also shown to be a factor affecting teaching[4]. How does the acquisition process proceeds? In other words, do learners acquire some words quicker than others? If that is the case, does the frequency of certain words influence language acquisition? It is worth examining if this variation proceeds first in the direction of the most common words than it does in the direction of the less frequent words.

Word frequency has profound effects on teaching and on education in general. A study by Marinellie and Johnson (2003) in their attempt at extending the study of word frequency discovered the robust effect of word frequency on adjective definitions of primary school children and of college students. Several content responses categories showed significant main effects of word frequency. Furthermore higher frequency words showed overall higher scores for most of the

[4] For more information about the effect of word frequency on teaching see Krishnasamy & Jaber (2012).

response categories. The study hypothesized that high frequency words often lead to the activation of a class term.

Word frequency may therefore have effects on the choice of words used by individuals especially on word input and word output. Share (1994, 1999) suggested an item-based account of word recognition and perception development in form of the *Self-Teaching Hypothesis* (STH). According to STH, phonology, through rule-analogy phonological recoding gives ability to the readers to decode new words in order to recognize and access the lexical semantics of the item and create lexical ambiguity. The significance of STH however lies in its claim that in order for readers to store an individual lexical item's specific orthographic representation for subsequent visual recognition free of laborious phonological recoding, it is necessary to have a small number of exposures and successful instances of decoding. This results in such visual recognition and perception of words being primarily relevant to high frequency words in the language with low frequency words still requiring phonological recoding. Furthermore, transiting from a phonological recoding to orthographic visual recognition of words is less demanding on the working memory thereby improving the summative reading comprehension. This provides opportunities for sub-vocalization as an aid to buffering the storage in working memory and this makes STH an ideal model as it is more explanatory (Askildson, 2008).

According to Hulstijn (2001), textual input is an important source for the lexical development of the L2 because reading enhances L2 learners' word recognition fluency and also because texts provide readers with input that has meaning and is semantically, syntactically, and pragmatically rich. For L2 learners to reach the advanced and near native speakers' language abilities, they must master such aspects of the lexicon (Rott, 2007).

Studies have shown that continued exposure to an unfamiliar word in a text or even its comprehension in its context might not result in immediate assignment of meaning to the orthographical representation of the word. Consequently, comprehension and learning are clearly not the same. Whereas comprehension of the text is for interpreting message content, word learning aims at establishing *Form-Meaning Connections* (FMCs) to build a lexical system. Reading a text for meaning actually requires rapid text-based and learner-based information integration. The reader must then construct a text base primarily through bottom up processing of the textual input. A text base is constructed from elements directly obtained from the text itself. This procedure generally gives rise to an impoverished and usually an incoherent network. The reader obtains a coherent network when they interconnect network propositions by complementing inferences and activating and integrating the existing sources of knowledge.

On the other hand, Prince (1996) stated that encoding in the mental lexicon of a new word requires that readers notice the gap in the mental lexicon first, then isolate the

word from its context and allocate attention resources to the word's orthographic and semantic properties. Consolidating the word in the mental lexicon requires the reader to recognize the relationship that exists between the lexical form and its meaning, which entails elaboration of some form by associating the word with existing sources of knowledge or even retaining it in the working memory for rehearsal (Ellis, 1994; Gass, 1979, 1997; Hulstijn, 2001).

According to (Laufer & Hulstijn, 2001), if there is no direct meaning attached to the word then readers have to search for and infer meaning by integrating the word's semantic and syntactic aspects using multiple strategic resources (Rott, 2007). However if we consider the assumption that the working memory is a limited capacity processing system, then it is clear that the cognitive mechanisms that are involved in reading comprehension and lexical acquisition are different and are even possibly in conflict. The mental capacity allows learners to handle a limited amount of materials at any given time as they naturally give more attention to some language aspects than others. Therefore, there are limitations on the amount of materials available to a L2 learner for comprehending and storing new words. However, learners of the L2 are usually encouraged to employ their mental capacities to the maximum as their teachers may not always teach them technical vocabularies. The learners must be able to form meaning, comprehend and store new words to enhance acquisition of the language as they gain more word knowledge by forming several meanings of words read (Rott, 2007).

Although several studies have been done to determine the effects of word frequency on teaching, there is still no clarity on the best methodologies that are conclusive and ultimate in helping learners to acquire L2. However, the development of this area of knowledge is contingent on growing a vocabulary that is big enough to ably encounter these comparatively rare word parts and appreciate their functions and significance. However, the order of acquisition that emerges suggests that this knowledge aspect may have factors that it is sensitive to including what transpires in the class and the goals of teaching. Knowledge of words and word parts may therefore be taught successfully even to learners with small vocabularies. This clearly is an area where there is a good opportunity for further research to provide us with new insights where we have limited evidence.

5.8 Summary

The choice of an approach to data analysis should be geared towards a theory that instantiates the real, gradual and natural life usage processes, a theory that could integrate the social and the linguistic. For this reason, this research adopts a cognitive approach to account for sociolinguistic variation and change to investigate the inner grammars of our linguistic system in order to understand better the interaction between the social and the linguistic. It is believed that a linguistic theory should be comprehensive enough to be able to account for the choice of lexical items accompanying language variation and change; a choice which is influenced by social factors.

It is believed that interaction is a key aspect of the process of people agreeing on word usage (Garrod & Anderson, 1987). A group of people who constantly communicate with each other over a long time period through language evolution will agree on word meanings. But, it is common for people to communicate with others whom they have never otherwise interacted, which may reduce the effectiveness of the natural interaction mechanism for agreeing on word meanings.

A usage-based analysis of 12 lexical items on the BD provides evidence for usage-based representations with analogy to these representations accounting for productive use. The analysis, based on token frequency and semantic similarity leads to the organization of tokens that are semantically related centered on a high-frequency exemplar. Overall the results support exemplar representations, which are heavily based on usage experience, i.e. on analogies to previous experience and not on rules that refer to abstract features.

In conclusion, this study confirms that frequency plays a major role in the acquisition process. Mostly, high frequency words are the ones that occur in the speech of varying groups. It has been shown that the more frequent the word, the higher its percentage in the speech of varying groups. This leads to the conclusion that the more frequent the word, the faster the acquisition of that word and the more likely for it to be acquired by people. Highly frequent words are even acquired by those whose speech can be characterized by the choice of another different variant.

Frequency should not be understood as the main reason for acquisition of the new form because social factors impose pressure on speakers to adopt the new form. The role of frequency is leading this adoption process towards the most common words first. This chapter has shown that lexical frequency is only one of a number of factors influencing language variation and change in the 12 lexical variables of the BD. These results show the limitations of an approach that puts lexical frequency at the front of model building and suggests that while lexical frequency is an important aspect to consider when dealing with language variation and change; it is only one of many.

CHAPTER SIX
DISCUSSION AND CONCLUSION

6.1 Introduction

Before elaborating on any sociolinguistic factors which have been shown to play a major role in forming the dialect of Baghdad, a brief summary of the results of this study is given. In-depth discussion of the research findings in relation to research objectives, questions and research hypotheses will be explained. The chapter also highlights on the significance of the study, and limitation and suggestions for future studies. Then, this chapter will be concluded by summing up the final conclusion of the study by emphasizing the importance of combining both the social and linguistic in one linguistic theory.

6.2 Summary of the Results

This thesis was categorized into six chapters. It investigated the sociolinguistic variation in the speech of educated males and females of three age groups in the BSC. The investigation included 12 lexical variables that were considered new features in the BD.

It was found that all the dependent variables under study have systematically correlated with the social variables in different levels of relationships except the word *irhab*. This study explored the effect of the social variables: gender and age on

the choice of the variables, and the effect of these social variables when interacting with each other.

Gender showed the clearest effect on the choice of the variables as it is also associated with prestige and social-status. It is expected from educated Baghdadi women to behave and speak politely since they are more prestige conscious than men and thus show a tendency to constantly choose the SA alternatives and forms to compensate on situations where only the new forms can express. Baghdadi men, on the other hand show the tendency to preserve the new lexical forms.

Gender as a social variable proved to be influential in the choice of most lexical variables. An important aspect of gender marking was shown in the sharper drop in the choice of new variants. When comparing one age group to another, it was found that the choice of new variants decreased more in the speech of females. This might be due to the increasing demand on the part of female to acquire prestigious forms to reflect their education in the community and receive better social roles.

Age was also a significant social factor affecting the choice of the variables. The effect of age could be linked to language choice, as older informants keep their dialectal features as a reflection of their belonging to a certain community. In the Baghdadi community, age is correlated with the choice of some new lexical items and shows a strong tendency towards linguistic innovations and thus young aged males are leading innovation toward non standard dialect.

It is clear in this study that there is a whole spectrum of linguistic variation and change in the BD. This change is bidirectional that is taking place toward the standard forms from one hand and new innovative local forms from the other hand. They are the young informants who made lexical change. It is also shown that the old informants proved to be more conservative trying to resist new forms due to the effect and pressure of their peer groups than any other age group. However, it was found in the research that there was some sort of correlation with some new lexical variables. This might be explained due to the strong political and social impact on the linguistic behavior of old informants from both genders. In addition, it has been shown that Baghdadi women are leading innovations toward the standard forms, inclusive of young and old females.

6.3 Discussion

The discussion of the research is based on the findings in relation to research questions, hypotheses, underlying theory and research objectives. Hypotheses were tested via regressions, t-tests and post hoc tests. The aim is to communicate the research findings in perspective hence prepare the ground for research conclusions.

6.3.1 The Effect of Gender on Lexical Choice

It was found that gender is one of the most important social factors correlating with lexical variation. In this study, women are more likely to signal their social status through their use of the standard, overtly prestigious variants. The higher proportion of nonstandard variants used by men can then be explained as an orientation which

symbolizes the toughness, and power that is associated with masculinity and actions of violence in the City of Baghdad. Since the change from the colloquial words, such as *allas* and *hawasim* in female speech to a standard and supralocal one, such as *mujrim* and *harami* respectively is driven by prestige, it is teleological, and thus follows a conscious process at least in the initial stages of acquisition of the prestigious forms. In addition, the stigma that is associated with some new forms, such as *kiki* and *hata* encourages females to abandon them and adopt the prestigious forms instead trying to find alternatives either from SA or a loan word. The 12 lexical items under study which are avoided by females in Baghdad except *tahshish*, *qaffas* and *militia* are indicative of the social awareness of them and their stigma as well as of the prestige of the standard forms those females switch to. This result is not different from other Western or Arabic studies and follows the general pattern that ties between the speech of women and the concept of prestige.

Many sociolinguistic studies have shown similar results regarding the increased choice of prestigious forms by women and younger generations (e.g., Cofer, 1972; Eckert, 1991b; Gal, 1979; Labov, 1972a; Miller, 2005; Milroy, 1980; Wolfram, 1969). Suleiman (1985, p. 45) believed that the social status of most Arab women is associated with their manner of speech, that is why "more 'correct' social behavior is expected". He added that women are also "inherently more sensitive to social prestige and social class division than men".

In her study of the speech of men and women in Baghdad, Abu-Haider (1989, p. 479) found that female speakers used the prestigious (standard) forms more than men and explained that "it is mostly women who opt for the prestigious speech varieties". While generally female speakers chose more standard items than male speakers when comparing age groups, surprisingly, it was found that the decrease in the choice of the standard variants is higher in the speech of male speakers from one age group to another. Male Baghdadis have shown a sharper decline in the choice of the standard variants and English loan word. As mentioned previously, unlike female speakers who associate their dialectal features with prestige, male speakers adapt their speech to the expectations of their masculinity in an environment of violence.

Male speakers feel the constant pressure to choose the variants which are considered to be local societal norms and hence become part of the environment of new Iraq after the war. This explanation coincides with Kiesling's (1998) study. Kiesling (p. 3) pointed out that "men strive for (and hold) powerful alignment roles because of societal ideology of *hegemonic masculinity*". Kiesling then (p. 26) explained that this type of masculinity pushes men to have powerful identity and this identity is characterized by physical violence.

In addition, the choice of militia by all females can also be attributed to the notion of *prestige*. Winford (2003, p. 37) made it clear that two factors have impact on borrowing: *need* and *prestige*. The adoption of *militia* integrated in the Baghdadi

dialect to the degree that it cannot be recognized as a foreign word. Androutsopoulo (2003) in analyzing the English loan words in German, made it clear that English has attained a status of prestige among languages, and young German used English words in their speech for certain reasons; first, to show their sophistication; second, to display a higher social status that the knowledge of English symbolizes; and finally, to set themselves off from others as a distinct social group (p. 274).

On the other hand, the choice of words to indicate offence has, as Hudson (1996, p. 240) stated, a positive value or what sociolinguists call ‘covert prestige’. Mesthrie, Swann, and Deumert (2000, p. 92) defined that type of prestige as "a set of opposing values implicit in lower and working class lifestyle". Mesthrie considered this prestige as a "mechanism for signaling adherence to local norms and values". These local values explain the choice of the new words by all males since they reflect ‘toughness’.

This study has found that women in Baghdad are more sensitive than men to the relationship between prestige and education. Al-Wer (1997) found that men in Jordan tend to use localized and older features which are often stigmatized, yet Jordanian women use wider regional features regardless of being SA or not. The case in Baghdad is different; for example, the choice of most variables by young and old female was directed toward the standard forms more than the local forms. The probable explanation of the tendency for female to choose the standard forms is due to the values, concepts and principles associated with the new forms of words. For

them, the new lexical items (except *tahshish* and *qaffas*) mirror an era of violence, killing, hatred, revenge, chaos and corruption. The high choice of *tahshish* by females supports this view since *hashash* makes no harm to people; on the contrary, he or she changes the atmosphere and causes laughter away from the actions of violence and threatening deeds. The high choice of *qaffas* between family members and friends explains its widespread use along the country. The words *tahshish* and *qaffas* are the only ones that females involve themselves in.

It appears in this study that the variant *harami* is connected to prestige and considered the preferred local variant in Baghdad. This contradicts Abu-Haider's (1989) statement that standard words are more prestigious than their local equivalents in Baghdad. However, since it was not explained in her study whether the context of choice was a formal or informal one, this may lie at the fact the political and social impacts are weaker now and this of course has an effect (after nine years of the innovation of (hawasim)) on the linguistic behavior of people, especially females and thus affect the choice of *hawasim*.

Harami is a superlocal lexical item that is used by most Arabs; therefore, when the choice was between a new local word *hawasim* and an old superlocal one *harami*, females prefer the old over the new since they are aware of the values and circumstances attached to the new word.

The third variant *ghashash* was limited to the choice of male and female of the ages 50-60 only and none of the other two age groups of both genders chose this variant which indicates that *ghashash* represents a former linguistic change introduced into the Baghdadi community by young men and women, who are now old. This might explain the choice of *gashash* by children who are affected by the speech of the old. This, indeed, coincides with Milroys' study in Belfast (1980) when they found that in Clonard, the gender pattern is taking the wrong way round. It is the older women who use more of the non -standard [ʌ] variant than young groups do.

Female speakers have shown to be highly sensitive to lexical differences. To avoid being different or less prestigious, female speakers feel greater pressure to use the most prestigious lexical items. Baghdadi male speakers have been shown to choose features that are associated with *power* and *masculinity* regardless of prestige, while female speakers use the prestigious features regardless of it being SA or dialectal when they were put in a situation to choose either new form or the old local form.

6.3.2 The Effect of Age on Lexical Choice

The age of the speaker is found to be a prominent factor that leads to variation and change. It is found that old informants seemed to maintain the old local forms of the Baghdadi dialect, and thus had the highest choice of non-standard variants in this study. In this respect, Chambers (1995, p. 125) stated that "most isolated speakers tend to be the most consistent dialect speakers". Thus, a person will maintain a certain variety of a language when living in a "small, tightly-knit, close-network type of community" (Trudgill, 1996, p. 3).

The first and second age groups in this study have been shown to adopt more of the new lexical items than the third age group. This study argues that the spread of linguistic changes is established through networks of communication in a community. The most active and mobile people initiate these linguistic differences in their communities, which spread afterwards throughout the society. Al-Wer (1991) found that the old in Arab societies are usually exposed to greater pressure to maintain their dialectal differences. An old person can be stigmatized by his friends and relatives for using new dialectal features. The youngest generation, on the other hand, seem to be the most active assimilators, as their lexicon is markedly new in this study. All variables investigated in this study show that the young males have significantly decreased the use of old lexical items and replaced them by the innovative ones.

This study shows that the younger groups are more prone to moving into different social networks than older generations. In addition, Al-Wer (1991, p. 147) found that in the Arab world, younger speakers seem to be the most sensitive in terms of sociolinguistic connotations of different variants and are more compelled to adopt linguistic innovations. It is notable that there is a wide ranging need to expand the vocabulary by new words which carry intense connotative sense to express primarily the speaker's mockery of or resistance to persons or institutions.

Combined with many other aspects of social environment, continual innovation of language in use strengthens, in certain respects, the union of people who adhere to the same patterns of behavior and thought. According to Eckert (2003) study, adolescents occupy "a particularly strong position to respond to change" (p. 115). Eckert pointed out to the fact that this strong position can be clearly seen in the immigrant groups where adolescents play as "societies transition teams, reinterpreting the world, resolving the old with the new" and hence, new lexical innovations are produced to signal 'coolness', 'toughness', or 'attitude' (p. 114).

This research considers young people in urban environments such as the City of Baghdad as one of the most important social carriers of lexical innovations today when the events of military and civilian violence have a strong impact on its people.

A pattern of linguistic change is taking place when the young people show linguistic pattern which is different from the old. The study of Norwich English (Chambers & Trudgill, 1998) highlighted that the speakers, those under thirty, are the innovators in their use of the variable [e]. In the same study, there were some linguistic variables that are no longer used. One such example is the Norwich variable [ir] which was found in the speech of the old only. The youngest and oldest people tend quite clearly to choose the vernacular forms. This is so because these two age groups seem to respond more to peer group pressure. And hence, non – prestige variants appear to be attributed to the notions of solidarity and toughness.

It is concluded therefore that the social concepts of *prestige*, *power* and *solidarity* (group membership) interacted with the age and gender of the speakers to shape the current Baghdadi dialect. Females have shown that maintaining their standard lexical items would foster and preserve the prestigious Baghdadi dialect. Although this study proposes the gradual disappearance of some new words in general, such as *hawasim*, *allas* and *mu'mmam* this may not be the case for the choice of other lexical items such as *qaffas, militia, mawlai, tahshish* and *sahwa*. In fact, the female choice remains the prestigious one, which for many represents what is thought to be the correct values of society.

6.4 Research Contributions

The significance of the study lies in its theoretical and practical contributions.

6.4.1 The Theoretical Contribution

This study shows that the sociolinguistic parameters are not the only notions that stand beyond males / females' different patterns of lexical variation and change. The cognitive approach was added in order to give a complete image of the overall process of variation and change.

The theoretical approach proves to be able to analyze sociolinguistic variation and change in the Arabic dialect spoken in the City of Baghdad in terms of social cognition and mental processes to determine lexical choice. The cognitive approach to lexical choice is primarily interested in the subjective meanings or experiences of individual language users that involve collectivities, such as groups and/ or institutions (Van Dijk, 2008). Thus, such an approach needs to relate properties of choice with these underlying, socially shared, representations: the social-psychological strategies typically defining this kind of choice. Combining cognitive and sociolinguistic approaches to lexical variation and change explains how social structures may affect lexical choice via a theory of social cognition and personal experience.

In order to fully understand and explain the choice of words, the broader societal structures on which such cognitions are ultimately based, and which at the same

time they enable, sustain and reproduce need to be spelt out. It has been shown how throughout the lexical choice, the negative opinion about the crime, corruption, violence and other consequences of 2003 war is linked with the overall social and mental ideology of concept of war, in which those criminals are the real enemies, against whose social behavior the whole community plays its specific role as victims of new values.

It is only at the highest level of cognitive analysis that it is able to fundamentally understand this choice, which changed the thoughts of people from being viewers (calling the persons who did illegal things as *hawasim* and *allas*) to being judges finding those persons guilty by calling them *mujrim* 'criminal' and *irhabi* 'terrorist'. It is this permanent bottom-up and top-down linkage of choice and interaction with societal structures that forms the most typical cognitive sociolinguistic approach.

The cognitive approach is able to incorporate the social meaning of language use in an account of sociolinguistic variation and change in the BSC and this approach can be generalized to be applied on other speech communities.

6.4.2 Practical Contribution

It is emphasized in this research that learning is embedded in social environment and that environmental influences are largely mediated through cognitive processes. The study refers to the major concepts of social cognitive learning theory, its recognition of the reciprocity and interaction among cognitive, behavioral, and social influence to explain the structure for educational experiences. In this learning process, it is

argued that children learn from a variety of experiences and from the observation of the actions of others.

Studies have established significant effects of word frequency on the spoken word recognition, lexical access and phonological acquisition with high frequency words being recognized faster and more accurately in tasks of word recognition (Marinellie & Chan, 2006). Such studies on lexical frequency have contributed immensely in understanding the existing relationship between the use of language and the structure of the language.

6.5 Suggestions for Future Studies

Although this study does not cover all the possible social factors that could be involved in the variation under investigation, it introduces a new dimension of sociolinguistic analysis that could be improved and expanded. It will be useful to academic research to include social factors, such as ethnicity, literacy, religion, social class and area of residence in future studies.

In addition to the above suggestions, longitudinal observational studies are a good source of data to make future predictions in the linear regression models about changes in progress. Such longitudinal observations could complement this study, in that they could provide the choice percentages of each variant in varying speakers throughout a number of years. The results will be informative about the directionality of variation and the change in the input intake of each variant if there is any.

In addition, as there are only three age groups, many Baghdadis are excluded from this study which may well have provided valuable insights (particularly with respect to future predictions for the development of the dialect which could have been tested further on even younger speakers). It would be interesting to investigate lexical changes in the speech of the participating informants in the future by conducting another investigation which goes hand in hand with the current study. Hence by comparing this study with the future one, dialectal changes can be tracked.

Moreover, the effect of the social networks on the speech of Baghdadis could be investigated further. The investigation of the informants' place of work or study, and the neighborhood would definitely assist in understanding the features used. This study has explored the key lexical differences found between the speech of Baghdadis in the light of sociolinguistic and cognitive factors. Other linguistic differences deserve further exploration in the Baghdadi speech community.

The level of education has been excluded as a social variable since the aim was to study the educated speech; however, the informants in this study had various levels of education. Another future study might benefit from adding level of education as a social variable, as many studies have shown that this factor correlates with linguistic realizations and it will be useful to explore whether increased educational opportunities would encourage higher choice of SA in the adaptation of new lexical items.

6.6 Conclusion

Sociolinguistic research has demonstrated that speakers' alternation between two or more linguistic choices (variants) expressing the same meaning (referred to as variation) is an integral part of spoken language competence (Labov, 1966, 1972a). Linguistic choice affects all components of language (syntax, morphology, lexicon, etc.). It is highly frequent in peoples' language choice and constrained by both linguistic factors (e.g., factors pertaining to the linguistic context in which the variants are used) and extra-linguistic factors (e.g., gender, social status or group identity, and register or style). Many researchers have stressed the role of both external and internal factors in language variation and change (e.g., Bell, 1984; Biber & Finegan, 1994, p. 316; Eckert, 1991a; Labov, 1972a, 1994, 2001; Mufwene, 2005) and the importance of taking both of these components into consideration when choosing a method of data analysis.

As discussed in chapter 5, an analysis of variation or change that only deals with social effects as motivating factors often paints an incomplete picture of the variation. The predicted relationship between language structure and language use that is thought to be visible through the effects of gender and age is only one element of sociolinguistic investigation. While an analysis of variation that compares across mean values for groups of speakers can highlight general patterns in the data, this type of statistical technique is limited in its ability to contribute to the understanding of the motivations of variation within category membership to reach a clearer understanding of the nature of the variation in the lexical choice.

Nonetheless, the quantitative analysis has its advantages in giving the researcher a head start on what social factors may be involved in the assumed variation and which are not; it also measures the type, strength and direction of variation and change. The words people choose in their daily lives can reveal important aspects of their social and psychological worlds. Therefore, some of the evidence in this research links natural word choice to personality, social and situational fluctuations, and psychological interventions.

The discussion of variation in this research has highlighted several issues. There is evidence of gender and age effects on lexical choice, a variation that can only be accounted for within sociolinguistic methods and analysis. However, this thesis argues that a cognitive analysis of grammar represents an argument in favor of an approach to variation that considers cognitive principles. A heavy emphasis is placed on a cognitive consequence of experience: the more frequently a lexical item is experienced, the more the item is used; the more entrenched an item is, the more likely it is to be activated in actual usage events. By invoking both a quantitative analysis of lexical choice and, more importantly, some of the basic assumptions of the cognitive approach the relationship that exists between lexical choice and variation began to be explained.

Based on these findings, this study reaches the following conclusions:

1. Gender and age have prominent effects on lexical choice which prove that peoples' choice is constrained by social pressures.

2. The choice of lexical items by women is ‘multidirectional’ based on specific dimensions which are attached to the values that a particular lexical item reflects.
3. The speech of the older and younger speakers shows patterns of lexical change. The older informants of both genders are conservatives trying to resist choosing the new forms of words. They are the young speakers of both genders who are the innovators. Accordingly, some variables are dropping out of choice.

Table 6. 1 below indicates the summary of the relation between the objectives, research questions and hypothesis. The study shows that the research hypotheses are accepted and the null hypothesis that there is no relation between the social variables and lexical choice is rejected.

Table 6. 2: The Summary of the Relation between the Objectives, Research Questions and Hypotheses

Objectives	Research Questions	Research Hypotheses	Decision
1. Identifying patterns of lexical variation according to males / females' choice of new lexical items of the BD.	1. Is there a significant difference in the lexical choice in terms of gender among educated Baghdadis?	H1 There is a significant difference in the choice of new lexical items in terms of gender among educated Baghdadis.	Accepted
2. Identifying any patterns of change according to three age groups.	2. Is there a significant difference in the lexical choice in terms of age among three age groups of educated Baghdadis?	H2 There is a significant difference in the choice of new lexical items in terms of age among three age groups of educated Baghdadis.	Accepted

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Appendix A

Map of Iraq

Source: http://geography.about.com/library/cia/blciraq.htm

Appendix B

Age, Gender and Level of Education of the Informants who Participated in this Study

NUMBER	AGE	GENDER	EDUCATION
1	60	Male	Masters graduate
2	51	Male	College graduate
3	50	Male	College graduate
4	59	Male	PhD graduate
5	52	Male	PhD student
6	55	Male	Masters graduate
7	58	Male	College graduate
8	54	Male	College graduate
9	50	Female	College graduate
10	51	Female	Masters graduate
11	51	Female	College graduate
12	60	Female	PhD graduate
13	60	Female	PhD graduate
14	59	Female	PhD graduate
15	60	Female	Masters graduate
16	56	Female	College graduate
17	35	Male	College graduate
18	34	Male	College graduate
19	39	Male	College graduate
20	37	Male	College graduate
21	38	Male	PhD graduate

22	35	Male	PhD student
23	33	Male	Masters graduate
24	38	Male	PhD student
25	30	Female	College graduate
26	36	Female	Masters graduate
27	40	Female	PhD student
28	38	Female	College graduate
29	39	Female	Masters graduate
30	30	Female	College graduate
31	33	Female	Masters student
32	31	Female	Masters graduate
33	20	Male	Undergraduate student
34	20	Male	Undergraduate student
35	21	Male	Undergraduate student
36	22	Male	Undergraduate student
37	24	Male	College graduate
38	24	Male	Undergraduate student
39	23	Male	Undergraduate student
40	19	Male	Undergraduate student

41	19	Female	Undergraduate student
42	19	Female	Undergraduate student
43	20	Female	Undergraduate student
44	21	Female	Undergraduate student
45	24	Female	Masters student
46	23	Female	Undergraduate student
47	22	Female	Undergraduate student
48	20	Female	Undergraduate student

Appendix C

Informants' Consents and Interview Questions

PART 1: CONSENT FOR PARTICIPATION IN THE INTERVIEW

Please consider this information carefully before deciding whether or not to participate in this research.

1-Purpose of the research:

The objective of the research is to identify patterns of lexical variation and change in the Arabic Dialect spoken in Baghdad through the choice of a number of words. This interview helps get information about word choice and peoples' social factors. Without your help and support this study will not be complete.

2-Time required:

The interview will take 30 minutes.

3-Confidentiality:

Your participation in this study will remain confidential, and your identity will not be stored with your data. Your responses will be assigned a code number. There are no anticipated risks associated with participating in this study. Your name and any other identifying information will NOT be shared with anyone.

4-Participation and withdrawal:

Your participation in this study is completely voluntary, and you may withdraw at any time without penalty. You may withdraw by informing the researcher that you no longer wish to participate (no questions will be asked).

5- Contact:

Please feel free to contact me at 07801351105 or rajaasabbar@yahoo.com if any additional information is needed.

6- Agreement:

The nature and purpose of this research have been sufficiently explained and I agree to participate in this study. I understand that I am free to withdraw at any time without incurring any penalty.

Signature: _____

Date: _____

Name _____

PART 11: INTERVIEW QUESTIONS

PERSONAL DETAILS

Age:_____

Education:_____

Gender:_____

Place of interview:_____

Time: _____

THE QUESTIONS

1. What do you call the person who steals from the banks and private and governmental institutions?

    1. Hawasim
    2. Harami
    3. Others

1. ماذا تسمي الشخص الذي يسرق من البنوك والمؤسسات الحكوميه والخاصه؟

1. حواسم

2. حرامي

3. اسماء اخرى

2. What do you call the person in the picture? Refer to picture 1.

    1. Hawasim
    2. Harami
    3. Others

2. ماذا تسمي الشخص في الصوره؟ انظر صوره رقم 1.

1. حواسم

2. حرامي

3. اسماء اخرى

3. If your house is robbed now, what do you call the person who does this?

1. Hawasim
2. Harami
3. Others

3. اذا سرق منزلك الان, ماذا تسمي الشخص الذي يقوم بذلك؟
1 . حواسم

2. حرامي

3. اسماء اخرى

4. What do you call the person who participated in stealing after 2003?

1. Hawasim
2. Harami
3. Others

4. ماذا تسمي الشخص الذي شارك في احداث السرقه بعد عام 2003؟
1. حواسم

2. حرامي

3. اسماء اخرى

5. What do you call the person who does illegal things?

1. Hawasim
2. Mujrim
3. Others

5. ماذا تسمي الشخص الذي يقوم بأعمال غير قانونيه؟
1. حواسم
2. مجرم
3. اسماء اخرى

6. What do you call those poor people who occupied the public lands and governmental institution?

1. Hawasim
2. Mutajawiz
3. Others

6. ماذا تسمي الفقراء الذين يشغلون الاماكن العامه والمؤسسات الحكوميه؟

1. حواسم

2. متجاوز

3. اسماء اخرى

7. What do you call those poor people in picture 2?

1. Hawasim
2. Mutajawiz
3. Others

7.اي تسميه تطلقها على الفقراء في صوره 2؟

1. حواسم

2. متجاوز

3. اسماء اخرى

8. What do you call the person who helps to gather information about a particular victim?

1. Allas
2. Mujrim
3. Irhabi
4. Others

8.ماذا تسمي الشخص الذي يساعد في جمع معلومات عن ضحيه معينه؟

1.علاس

2. مجرم

3. ارهابي

4. اسماء اخرى

9. What do you call the person in picture 3?

1. Allas

2. Mujrim
3. Irhabi
4. Others

9. ماذا تسمي الشخص في صوره 3؟
1.علاس
2. مجرم
3. ارهابي
4 . اسماء اخرى

10. What do you call the person/persons who does/do kidnapping?

1. Allas
2. Irhabi
3. Others

10. ماذا تسمي الشخص الذي يقوم بعمليات اختطاف؟
1.علاس
2. ارهابي
3. اسماء اخرى

11. What do you call the person in picture 4?

1. Allas
2. Irhabi
3. Others

11. ماذا تسمي الشخص في صور 4؟
1.علاس
2. ارهابي
3.اسماء اخرى

12. If you have been cheated by somebody, what do you call the person who did it?

1. Qaffas
2. Nassab
3. Ghashash
4. Others

12. اذا خدعت من قبل شخصا ما, اي تسميه تطلق عليه؟
1.قفاص
2.نصاب
3. غشاش
4. اسماء اخرى

13. Of what person does picture 5 remind you?

1. Qaffas
2. Nassab
3. Ghashash
4. Others

14. بأي تسميه صوره رقم 5 تذكرك؟

1.قفاص
2.نصاب
3. غشاش
4. اسماء اخرى

15. What do you call the person who puts a turban on his head?

1. Mu'mmam
2. Rajuldeen
3. Sheikh/Sayyid
4. Others

15. ماذا تسمي الشخص الذي يضع عمامه على رأسه؟

1. معمم
2. رجل دين
3. شيخ/ سيد
4. اسماء اخرى

16. What do you call the person in picture 6?

1. Mu'mmam
2. Rajuldeen
3. Sheikh/Sayyid
4. Others

16.ماذا تسمي الشخص في صوره رقم 6؟

1 . معمم

2. رجل دين

3. شيخ/ سيد

4. اسماء اخرى

17. What title do you use, as a sign of respect, when you talk with a religion man?

1. Mawlai
2. Sheikh/Sayyid
3. Others

17.اي لقب تستخدم, كنوع من الاحترام, عندما تتحدث الى رجل دين؟

1. مولاي

2. شيخ/ سيد

3. اسماء اخرى

18. If you use the word "mawlai" in your speech, for what purposes?

1. Respect
2. Mockery
3. Friendship

18.لاي غرض تستخدم كلمة مولاي في كلامك؟

1. احترام

2.سخريه

3. صداقه

19. If your friend does something good, what do you say to praise him/her?

1. Ahsant
2. Jayyid
3. Others

19.اذا صديق لك قام بعمل جيد, ماذا تقول كي تمدحه/تمدحها؟

1. احسنت

2. جيد

3. اسماء اخرى

20. What do you call a stylish young man with a particular hair dressing?

1. Kiki
2. Style
3. Modern
4. Others

2.ماذا تسمي الشاب المتأنق ذو قصة شعر مميزه؟

1. كيكي
2. ستايل
3. مودرن
4. اسماء اخرى

21. Name the man in picture 7.

1. Kiki
2. Style
3. Modern
4. Others

21.سمي الرجل في صوره 7؟

1 . كيكي
2. ستايل
3. مودرن
4. اسماء اخرى

22. What do you call a beautiful young lady?

1. Hata
2. Jamila
3. Hilwa
4. Others

22.ماذا تسمي الفتاة الشابه الجميله؟

1. حاته
2. جميله
3. حلوه
4. اسماء اخرى

23. What do you call the young lady in picture 8?

1. Hata
2. Jamila
3. Hilwa
4. Others

23.ماذا تسمي الشابه في صوره رقم 8؟

1. حاته
2. جميله
3. حلوه
4. اسماء اخرى

24. What do you call the process of using fragments of sentences to make people laugh?

1. Tahshish
2. Tasnif
3. Others

24.ماذا تسمي عملية اضحاك الاخرين بأستخدام مقاطع جمل مختلفه؟

1.تحشيش
2. تصنيف
3. اسماء اخرى

25. Name picture 9.

1. Tahshish
2. Tasnif
3. Others

25.سمي صوره رقم 9؟

1.تحشيش
2. تصنيف
3. اسماء اخرى

26. What do you call the young people who belong to one of the parties and hold guns and weapons in the streets of Baghdad?

1. Militia
2. Musallahin
3. Others

26.ماذا تسمي الشباب الذين يحملون السلاح في شوارع بغداد وينتمون لاحد الاحزاب؟

1. ميليشيا

2.مسلحين

3. اسماء اخرى

27. What do you call the young people in the picture? Refer to picture 10.

1. Militia
2. Musallahin
3. Others

27.ماذا تسمي الشباب في الصوره؟ انظر صوره رقم 10.

1. ميليشيا

2. مسلحين

3. اسماء اخرى

28. What do you call those groups of armed people who have been attached to the government recently and who protect different areas in Baghdad and the west part of Iraq?

1. Sahwa
2. Musallahin
3. Others

28. ماذا تسمي الجماعات المسلحه الذين ارتبطوا بالحكومه مؤخرا والذين يحمو مناطق مختلفه من بغداد بالاضافه الى غرب العراق؟

1. ميليشيا

2. مسلحين

3. اسماء اخرى

29. What do you call those groups of armed people in picture 11? Refer to picture 11.

1. Sahwa
2. Musallahin
3. Others

29.ماذا الجماعات المسلحه في صوره 11؟ انظر صوره 11.

1. صحوه

2.مسلحين

3. اسماء خرى

30. What do you call the events of killing, kidnapping and bombing suicide in Iraq since 2003?

1. Irhab
2. Jihad
3. Ta'fiyya
4. Others

30.ماذا تسمي احداث القتل والاختطاف والعمليات الانتحاريه في العراق منذ 2003؟

1. ارهاب

2.جهاد

3.طائفيه

4. اسماء اخرى

31. Name picture 12.

1. Irhab
2. Jihad
3. Ta'fiyya
4. Others

31.سمي صوره رقم 12؟

. ارهاب

2.جهاد
3.طائفيه
4. اسماء اخرى

Thank you for your cooperation. This would be of much value to my research.

Rajaa Sabbar Jaber
A PhD student in Applied Linguistics
University Utara Malaysia

Picture 1

A Man Holding Heap of Money

Picture 2

Poor People Occupying Public Lands

Picture 3

Disguised Armed Men Drag Victims to an Unknown Destiny

Picture 4

A Veiled Man Reading a Sentence Upon the Covered-Eyed Hostages

Picture 5

A Bird in a Cage

Picture 6

A Man Wearing a White Turban

Picture 7

A Young Man of Modern Style

Picture 8

A Beautiful Young Lady

Picture 9

The Monaliza Wearing the Traditional Iraqi Gown

Picture 10

Two Disguised Armed Men

Picture 11

Armed Men amid People in the Street

Picture 12

A Big Explosion in Al-Rasheed Street in Baghdad

Appendix D

Correlations, Partial Correlations and Regressions

1. VARIABLE 1

1.1. CORRELATION, PARTIAL CORRELATION AND REGRESSION FOR VARIANT 1 AND VARIANT 2

Descriptive Statistics

	Mean	Std. Deviation	N
GENDER	1.50	.505	48
AGE	2.00	.825	48
[hawasim]	.33	.476	48
[harami]	.67	.823	48

Correlations

		GENDER	AGE	[hawasim]	[harami]
GENDER	Pearson Correlation	1	.320	-.442**	.668**
	Sig. (2-tailed)		.082	.002	.001
	N	48	48	48	48
AGE	Pearson Correlation	.320	.210	-.390*	.378*
	Sig. (2-tailed)	.082	.232	.004	.004
	N	48	48	48	48
[hawasim]	Pearson Correlation	-.442**	-.390*	1	-.120
	Sig. (2-tailed)	.002	.004		.165
	N	48	48	48	48
[harami]	Pearson Correlation	.668**	.387*	-.120	1
	Sig. (2-tailed)	.001	.004	.165	
	N	48	48	48	48

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Correlations

Control Variables			[hawasim]	[harami]	AGE
GENDER	[hawasim]	Correlation	.232	-.120	.390
		Significance (2-tailed)	.342	.165	.010
		df	2	45	45
	[harami]	Correlation	-.120	.121	.378
		Significance (2-tailed)	.165	.113	.004
		df	45	0	45
	AGE	Correlation	.390	.378	.210
		Significance (2-tailed)	.010	.004	.232
		df	45	45	2

Correlations

		[hawasim]	GENDER	AGE
Pearson Correlation	[hawasim]	1.000	-.442	.390
	GENDER	-.442	1.000	.010
	AGE	.390	.000	1.000
Sig. (1-tailed)	[hawasim]	.	.001	.010
	GENDER	.001	.	.500
	AGE	.010	.500	.
N	[hawasim]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: [hawasim]

Model Summary

Model					Change Statistics		
	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.471[a]	.222	.187	.430	.222	6.408	2

a. Predictors: (Constant), AGE, GENDER

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.365	2	1.182	6.408	.004[a]
	Residual	8.302	45	.184		
	Total	10.667	47			

a. Predictors: (Constant), AGE, GENDER
b. Dependent Variable: [hawasim]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.771	.248		3.108	.008
	GENDER	-.417	.124	-.442	-3.360	.002
	AGE	.334	.076	.162	1.235	.010

a. Dependent Variable: : [hawasim]

Coefficients[a]

Model		Correlations		
		Zero-order	Partial	Part
1	(Constant)			
	GENDER	-.442	-.448	-.442
	AGE	.390	.391	.390

a. Dependent Variable: [hawasim]

Correlations

		[harami]	GENDER	AGE
Pearson Correlation	[harami]	1	.668	.387
	GENDER	.668	1	.320
	AGE	.387	.320	.210
Sig. (1-tailed)	[harami]	.	.001	.004
	GENDER	.001	.	.082
	AGE	.135	.500	.232
N	[harami]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.
b. Dependent Variable: [harami]

Model Summary

Model					Change Statistics		
	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.741[a]	.523	.587	.448	.523	5.908	2

a. Predictors: (Constant), AGE, GENDER

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.365	2	1.172	5.408	.001[a]
	Residual	8.302	45	.174		
	Total	11.667	47			

a. Predictors: (Constant), AGE, GENDER
b. Dependent Variable: [harami]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.961	.248		3.108	.008
	GENDER	.664	.124	.664	3.360	.001
	AGE	.387	.076	.387	1.235	.004

a. Dependent Variable: : [harami]

Coefficients[a]

Model		Correlations		
		Zero-order	Partial	Part
1	(Constant)			
	GENDER	.664	.668	.668
	AGE	.387	.387	.387

a. Dependent Variable: [harami]

1.2. CORRELATION, PARTIAL CORRELATION AND REGRESSION FOR VARIANT 1 AND VARIANT 3

Descriptive Statistics

	Mean	Std. Deviation	N
GENDER	1.50	.505	48
AGE	2.00	.825	48
[hawasim]	.06	.245	48
[mujrim]	.94	.245	48

Correlations

		GENDER	AGE	[hawasim]	[mujrim]
GENDER	Pearson Correlation	1	.000	-.258	.258
	Sig. (2-tailed)		1.000	.076	.076
	N	48	48	48	48
AGE	Pearson Correlation	.000	1	.105	-.105
	Sig. (2-tailed)	1.000		.476	.476
	N	48	48	48	48
[hawasim]	Pearson Correlation	-.258	.105	1	-.120
	Sig. (2-tailed)	.076	.476		.034
	N	48	48	48	48
[mujrim]	Pearson Correlation	.258	-.105	-.120	1
	Sig. (2-tailed)	.076	.476	.034	
	N	48	48	48	48

Correlations

Control Variables			GENDER	[hawasim]	[mujrim]
AGE	GENDER	Correlation	1.000	-.260	.260
		Significance (2-tailed)	.	.078	.078
		df	0	45	45
	[hawasim]	Correlation	-.260	1.000	-.120
		Significance (2-tailed)	.078	.	.034
		df	45	0	45
	[mujrim]	Correlation	.260	-.120	1.000
		Significance (2-tailed)	.078	.034	.
		df	45	45	0

Correlations

Control Variables			[hawasim]	[mujrim]	AGE
GENDER	[hawasim]	Correlation	1.000	-.120	.109
		Significance (2-tailed)	.	.034	.465
		df	0	45	45
	[mujrim]	Correlation	-.120	1.000	-.109
		Significance (2-tailed)	.034	.	.465
		df	45	0	45
	AGE	Correlation	.109	-.109	1.000
		Significance (2-tailed)	.465	.465	.
		df	45	45	0

Correlations

		[hawasim]	GENDER	AGE
Pearson Correlation	[hawasim]	1.000	-.258	.105
	GENDER	-.258	1.000	.000
	AGE	.105	.000	1.000
Sig. (1-tailed)	[hawasim]	.	.038	.238
	GENDER	.038	.	.500
	AGE	.238	.500	.
N	[hawasim]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: [hawasim]

Model Summary

Model					Change Statistics		
	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.279[a]	.078	.037	.240	.078	1.898	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.162

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.219	2	.109	1.898	.162[a]
	Residual	2.594	45	.058		
	Total	2.813	47			

a. Predictors: (Constant), AGE, GENDER

b. Dependent Variable: [hawasim]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.188	.139		1.353	.183
	GENDER	-.125	.069	-.258	-1.804	.078
	AGE	.031	.042	.105	.736	.465

a. Dependent Variable: [hawasim]

Coefficients[a]

Model		Correlations		
		Zero-order	Partial	Part
1	(Constant)			
	GENDER	-.258	-.260	-.258
	AGE	.105	.109	.105

a. Dependent Variable: [hawasim]

Correlations

		[mujrim]	GENDER	AGE
Pearson Correlation	[mujrim]	1.000	.258	-.105
	GENDER	.258	1.000	.000
	AGE	-.105	.000	1.000
Sig. (1-tailed)	[mujrim]	.	.038	.238
	GENDER	.038	.	.500
	AGE	.238	.500	.
N	[mujrim]	48	48	48
	GENDER	48	48	48

Correlations

		[mujrim]	GENDER	AGE
Pearson Correlation	[mujrim]	1.000	.258	-.105
	GENDER	.258	1.000	.000
	AGE	-.105	.000	1.000
Sig. (1-tailed)	[mujrim]	.	.038	.238
	GENDER	.038	.	.500
	AGE	.238	.500	.
N	[mujrim]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: [mujrim]

Model Summary

Model				Change Statistics		
	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.279[a]	.078	.037	.240	.078	1.898	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.162

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.219	2	.109	1.898	.162[a]
	Residual	2.594	45	.058		
	Total	2.813	47			

a. Predictors: (Constant), AGE, GENDER

b. Dependent Variable: [mujrim]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.813	.139		5.862	.000
	GENDER	.125	.069	.258	1.804	.078
	AGE	-.031	.042	-.105	-.736	.465

a. Dependent Variable: [mujrim]

Coefficients[a]

Model		Correlations		
		Zero-order	Partial	Part
1	(Constant)			
	GENDER	.258	.260	.258
	AGE	-.105	-.109	-.105

a. Dependent Variable: [mujrim]

1.3 CORRELATION, PARTIAL CORRELATION AND REGRESSION FOR VARIANT 1 AND VARIANT 4

Descriptive Statistics

	Mean	Std. Deviation	N
GENDER	1.50	.505	48
AGE	2.00	.825	48
[hawasim]	.06	.245	48
[mutajawiz]	.94	.245	48

Correlations

		GENDER	AGE	[hawasim]	[mutajawiz]
GENDER	Pearson Correlation	1	.000	-.428**	.664**
	Sig. (2-tailed)		1.000	.000	.000
	N	48	48	48	48
AGE	Pearson Correlation	.000	1	-.466*	.432*
	Sig. (2-tailed)	1.000		.029	.029
	N	48	48	48	48
[hawasim]	Pearson Correlation	-.428**	-.466*	1	-0.257
	Sig. (2-tailed)	.000	.029		.065
	N	48	48	48	48
[mutajawiz]	Pearson Correlation	.664**	.432*	-0.257	1
	Sig. (2-tailed)	.000	.029	.065	
	N	48	48	48	48

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations					
Control Variables			GENDER	[hawasim]	[mutajawiz]
AGE	GENDER	Correlation	1.000	-.428	.664
		Significance (2-tailed)	.	.000	.000
		df	0	45	45
	[hawasim]	Correlation	-.428	1.000	-0.257
		Significance (2-tailed)	.000	.	.065
		df	45	0	45
	[mutajawiz]	Correlation	.664	-0.257	1.000
		Significance (2-tailed)	.000	.065	.
		df	45	45	0

Correlations					
Control Variables			[hawasim]	[mutajawiz]	AGE
GENDER	[hawasim]	Correlation	1.000	-0.257	-.466
		Significance (2-tailed)	.	.065	.029
		df	0	45	45
	[mutajawiz]	Correlation	-0.257	1.000	.432
		Significance (2-tailed)	.065	.	.029
		df	45	0	45
	AGE	Correlation	-.466	.432	1.000
		Significance (2-tailed)	.029	.029	.
		df	45	45	0

Correlations				
		[hawasim]	GENDER	AGE
Pearson Correlation	[hawasim]	1.000	-.428	-.466
	GENDER	-.428	.000	.000
	AGE	-.466	.000	1.000
Sig. (1-tailed)	[hawasim]	.	.000	.029
	GENDER	.000	.	.500
	AGE	.029	.500	.
N	[hawasim]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]			
Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: [hawasim]

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	.729[a]	.588	.437	.240	.588	1.898	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.162

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.219	2	.109	1.898	.162[a]
	Residual	2.594	45	.058		
	Total	2.813	47			

a. Predictors: (Constant), AGE, GENDER
b. Dependent Variable: [hawasim]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.188	.139		1.353	.183
	GENDER	-.125	.069	-.432	-1.804	.008
	AGE	.031	.042	.466	.736	.004

a. Dependent Variable: [hawasim]

Coefficients[a]

Model		Correlations		
		Zero-order	Partial	Part
1	(Constant)			
	GENDER	-.432	-.432	-.258
	AGE	.466	.466	.105

a. Dependent Variable: [hawasim]

Correlations

		[mutajawiz]	GENDER	AGE
Pearson Correlation	[mutajawiz]	1.000	.664	.432
	GENDER	.664	1.000	.000
	AGE	.432	.000	1.000
Sig. (1-tailed)	[mutajawiz]	.	.038	.029
	GENDER	.000	.	.500
	AGE	.029	.500	.
N	[mutajawiz]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: [mutajawiz]

Model Summary

Model					Change Statistics		
	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.799[a]	.578	.337	.240	.578	1.898	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.162

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.219	2	.109	1.898	.162[a]
	Residual	2.594	45	.058		
	Total	2.813	47			

a. Predictors: (Constant), AGE, GENDER

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.219	2	.109	1.898	.162[a]
	Residual	2.594	45	.058		
	Total	2.813	47			

a. Predictors: (Constant), AGE, GENDER
b. Dependent Variable: [mutajawiz]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.713	.149		5.662	.000
	GENDER	.425	.059	.664	1.604	.000
	AGE	-.331	.042	-.432	-.636	.004

a. Dependent Variable: [mutajawiz]

Coefficients[a]

Model		Correlations		
		Zero-order	Partial	Part
1	(Constant)			
	GENDER	.664	.664	.258
	AGE	-.432	-.432	-.105

a. Dependent Variable: [mutajawiz]

2. VARIABLE 2

2.1. CORRELATION, PARTIAL CORRELATION AND REGRESSION FOR VARIANT 1 AND VARIANT 2

Descriptive Statistics

	Mean	Std. Deviation	N
GENDER	1.50	.505	48
AGE	2.00	.825	48
[allas]	.38	.489	48
[mujrim]	.63	.489	48

Correlations

		GENDER	AGE	[allas]	[mujrim]
GENDER	Pearson Correlation	1	.400	-.516**	.516**
	Sig. (2-tailed)		.230	.000	.000
	N	48	48	48	48
AGE	Pearson Correlation	.400	1	-.321*	.321*
	Sig. (2-tailed)	.230		.010	.010
	N	48	48	48	48
[allas]	Pearson Correlation	-.516**	-.321*	1	-.120
	Sig. (2-tailed)	.000	.010		.110
	N	48	48	48	48
[mujrim]	Pearson Correlation	.516**	.321*	-.120	1
	Sig. (2-tailed)	.000	.010	.110	
	N	48	48	48	48

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Correlations

Control Variables			GENDER	[allas]	[mujrim]
AGE	GENDER	Correlation	1.000	-.528	.528
		Significance (2-tailed)	.	.000	.000
		df	0	45	45
	[allas]	Correlation	-.528	1.000	-.120
		Significance (2-tailed)	.000	.	.110
		df	45	0	45
	[mujrim]	Correlation	.528	-.120	1.000
		Significance (2-tailed)	.000	.110	.
		df	45	45	0

Correlations

Control Variables			[allas]	[mujrim]	AGE
GENDER	[allas]	Correlation	1.000	-.120	-.321
		Significance (2-tailed)	.	.110	.010
		df	0	45	45
	[mujrim]	Correlation	-.120	1.000	.321
		Significance (2-tailed)	.110	.	.010
		df	45	0	45
	AGE	Correlation	-.321	.321	1.000
		Significance (2-tailed)	.010	.010	.
		df	45	45	0

Correlations

		[allas]	GENDER	AGE
Pearson Correlation	[allas]	1.000	-.516	-.321
	GENDER	-.528	1.000	.000
	AGE	-.321	.000	1.000
Sig. (1-tailed)	[allas]	.	.000	.010
	GENDER	.000	.	.500
	AGE	.010	.500	.
N	[allas]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER [a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: [allas]

Model Summary

Model					Change Statistics		
	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.558[a]	.311	.280	.415	.311	10.161	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.000

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.500	2	1.750	10.161	.000[a]
	Residual	7.750	45	.172		
	Total	11.250	47			

a. Predictors: (Constant), AGE, GENDER
b. Dependent Variable: [allas]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.875	.240		3.652	.001
	GENDER	-.500	.120	-.516	-4.174	.000
	AGE	.325	.073	.321	2.704	.012

a. Dependent Variable: [allas]

Coefficients[a]

Model		Correlations		
		Zero-order	Partial	Part
1	(Constant)			
	GENDER	-.516	-.528	-.516
	AGE	-.321	-.321	-.321

a. Dependent Variable: [allas]

Descriptive Statistics

	Mean	Std. Deviation	N
[mujrim]	.63	.489	48
GENDER	1.50	.505	48
AGE	2.00	.825	48

Correlations

		[mujrim]	GENDER	AGE
Pearson Correlation	[mujrim]	1.000	.516	.321
	GENDER	.516	1.000	.000
	AGE	-.211	.000	1.000
Sig. (1-tailed)	[mujrim]	.	.000	.010
	GENDER	.000	.	.500
	AGE	.010	.500	.
N	[mujrim]	48	48	48
	GENDER	48	48	48

Correlations

		[mujrim]	GENDER	AGE
Pearson Correlation	[mujrim]	1.000	.516	.321
	GENDER	.516	1.000	.000
	AGE	-.211	.000	1.000
Sig. (1-tailed)	[mujrim]	.	.000	.010
	GENDER	.000	.	.500
	AGE	.010	.500	.
N	[mujrim]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.
b. Dependent Variable: [mujrim]

Model Summary

Model					Change Statistics		
	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.558[a]	.311	.280	.415	.311	10.161	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.000

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.500	2	1.750	10.161	.000[a]
	Residual	7.750	45	.172		
	Total	11.250	47			

a. Predictors: (Constant), AGE, GENDER
b. Dependent Variable: [mujrim]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.125	.240		.522	.604
	GENDER	.500	.120	.516	4.174	.000
	AGE	.312	.073	.312	3.704	.010

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.125	.240		.522	.604
	GENDER	.500	.120	.516	4.174	.000
	AGE	.312	.073	.312	3.704	.010
a. Dependent Variable: [mujrim]						

Coefficients[a]				
Model		Correlations		
		Zero-order	Partial	Part
1	(Constant)			
	GENDER	.516	.528	.516
	AGE	.312	.312	.312
a. Dependent Variant: [mujrim]				

2.2. CORRELATION, PARTIAL CORRELATION AND REGRESSION FOR VARIANT 1 AND VARIANT 3

Descriptive Statistics			
	Mean	Std. Deviation	N
GENDER	1.50	.505	48
AGE	2.00	.825	48
[allas]	.29	.459	48
[irhabi]	.71	.459	48

Correlations					
		GENDER	AGE	[allas]	[irhabi]
GENDER	Pearson Correlation	1	.100	-.445**	.275
	Sig. (2-tailed)		.220	.009	.059
	N	48	48	48	48
AGE	Pearson Correlation	.100	1	-.356*	.356*
	Sig. (2-tailed)	.220		.005	.005
	N	48	48	48	48
[allas]	Pearson Correlation	-.445**	-.356*	1	.100
	Sig. (2-tailed)	.009	.005		.220
	N	48	48	48	48
[irhabi]	Pearson Correlation	.275	.356*	.100	1
	Sig. (2-tailed)	.059	.005	.220	
	N	48	48	48	48
**. Correlation is significant at the 0.01 level (2-tailed).					
*. Correlation is significant at the 0.05 level (2-tailed).					

Correlations

Control Variables			GENDER	[allas]	[irhabi]
AGE	GENDER	Correlation	1.000	-.445	.275
		Significance (2-tailed)	.	.009	.061
		df	0	45	45
	[allas]	Correlation	-.445	1.000	.100
		Significance (2-tailed)	.009	.	.220
		df	45	0	45
	[irhabi]	Correlation	.275	.100	1.000
		Significance (2-tailed)	.061	.220	.
		df	45	45	0

Correlations

Control Variables			[allas]	[irhabi]	AGE
GENDER	[allas]	Correlation	1.000	.100	-.356*
		Significance (2-tailed)	.	.220	.005
		df	0	45	45
	[irhabi]	Correlation	.100	1.000	.356*
		Significance (2-tailed)	.220	.	.005
		df	45	0	45
	AGE	Correlation	-.356*	.356*	1.000
		Significance (2-tailed)	.005	.005	.
		df	45	45	0

Correlations

		[allas]	GENDER	AGE
Pearson Correlation	[allas]	1.000	-.445**	-.356*
	GENDER	-.445**	1.000	.005
	AGE	-.356*	.000	1.000
Sig. (1-tailed)	[allas]	.	.029	.352
	GENDER	.009	.	.500
	AGE	.005	.500	.
N	[allas]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: [allas]

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
	.581[a]	.379	.338	.451	.379	2.924	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.018

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.781	2	.591	2.924	.018[a]
	Residual	10.135	45	.203		
	Total	10.917	47			

a. Predictors: (Constant), AGE, GENDER

b. Dependent Variable: [allas]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.729	.260		2.803	.007
	GENDER	-.445	.230	-.445	-1.922	.006
	AGE	-.356	.180	-.356	-.392	.007

a. Dependent Variable: [allas]

Coefficients[a]

Model		Correlations		
		Zero-order	Partial	Part
1	(Constant)			
	GENDER	-.445	-.445	-.445
	AGE	-.356	-.356	-.356

a. Dependent Variable: [allas]

Descriptive Statistics

	Mean	Std. Deviation	N
[irhabi]	.71	.459	48
GENDER	1.50	.505	48
AGE	2.00	.825	48

Correlations

		[irhabi]	GENDER	AGE
Pearson Correlation	[irhabi]	1.000	.275	.356
	GENDER	.275	1.000	.000
	AGE	.356	.000	1.000
Sig. (1-tailed)	[irhabi]	.	.029	.352
	GENDER	.059	.	.500
	AGE	.005	.500	.
N	[irhabi]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: [irhabi]

Model Summary

Model					Change Statistics		
	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.681[a]	.479	.338	.451	.379	2.924	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.008

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.696	2	.391	2.924	.008[a]
	Residual	10.220	45	.203		
	Total	10.917	47			

a. Predictors: (Constant), AGE, GENDER

b. Dependent Variable: [irhabi]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.271	.260		1.041	.303
	GENDER	.275	.130	.275	1.922	.061
	AGE	.356	.280	.356	.392	.007

a. Dependent Variable: [irhabi]

Coefficients[a]

Model		Correlations		
		Zero-order	Partial	Part
1	(Constant)			
	GENDER	.275	.275	.275
	AGE	.356	.356	.356

a. Dependent Variable: [irhabi]

3. VARIABLE 3

Descriptive Statistics

	Mean	Std. Deviation	N
GENDER	1.50	.505	48
AGE	2.00	.825	48
[qaffas]	.40	.494	48
[nasab]	.42	.498	48
[ghashash]	.19	.394	48

Correlations

		GENDER	AGE	[qaffas]	[nasab]	[ghashash]
GENDER	Pearson Correlation	1	.000	-.298*	.169	.160
	Sig. (2-tailed)		1.000	.040	.251	.277
	N	48	48	48	48	48
AGE	Pearson Correlation	.000	1	-.626**	.155	.588**
	Sig. (2-tailed)	1.000		.000	.292	.000
	N	48	48	48	48	48
[qaffas]	Pearson Correlation	-.298*	-.626**	1	.165	.126
	Sig. (2-tailed)	.040	.000		.292	.142
	N	48	48	48	48	48
[nasab]	Pearson Correlation	.169	.155	.165	1	-.122
	Sig. (2-tailed)	.251	.292	.292		.234
	N	48	48	48	48	48
[ghashash]	Pearson Correlation	.160	.588**	.126	-.122	1
	Sig. (2-tailed)	.277	.000	.142	.234	
	N	48	48	48	48	48

*. Correlation is significant at the 0.05 level (2-tailed).

Correlations

		GENDER	AGE	[qaffas]	[nasab]	[ghashash]
GENDER	Pearson Correlation	1	.000	-.298*	.169	.160
	Sig. (2-tailed)		1.000	.040	.251	.277
	N	48	48	48	48	48
AGE	Pearson Correlation	.000	1	-.626**	.155	.588**
	Sig. (2-tailed)	1.000		.000	.292	.000
	N	48	48	48	48	48
[qaffas]	Pearson Correlation	-.298*	-.626**	1	.165	.126
	Sig. (2-tailed)	.040	.000		.292	.142
	N	48	48	48	48	48
[nasab]	Pearson Correlation	.169	.155	.165	1	-.122
	Sig. (2-tailed)	.251	.292	.292		.234
	N	48	48	48	48	48
[ghashash]	Pearson Correlation	.160	.588**	.126	-.122	1
	Sig. (2-tailed)	.277	.000	.142	.234	
	N	48	48	48	48	48

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

Control Variables			GENDER	[ghashash]	[nasab]	[qaffas]
AGE	GENDER	Correlation	1.000	.198	.171	-.382
		Significance (2-tailed)	.	.182	.250	.008
		df	0	45	45	45
	[ghashash]	Correlation	.198	1.000	-.623	-.032
		Significance (2-tailed)	.182	.	.000	.829
		df	45	0	45	45
	[nasab]	Correlation	.171	-.623	1.000	-.762
		Significance (2-tailed)	.250	.000	.	.000
		df	45	45	0	45
	[qaffas]	Correlation	-.382	-.032	-.762	1.000
		Significance (2-tailed)	.008	.829	.000	.
		df	45	45	45	0

Correlations

Control Variables			[ghashash]	[nasab]	[qaffas]	AGE
GENDER	[ghashash]	Correlation	1.000	-.445	-.362	.596
		Significance (2-tailed)	.	.002	.012	.000
		df	0	45	45	45
	[nasab]	Correlation	-.445	1.000	-.674	.158
		Significance (2-tailed)	.002	.	.000	.290
		df	45	0	45	45
	[qaffas]	Correlation	-.362	-.674	1.000	-.656
		Significance (2-tailed)	.012	.000	.	.000

	df	45	45	0	45
AGE	Correlation	.596	.158	-.656	1.000
	Significance (2-tailed)	.000	.290	.000	.
	df	45	45	45	0

Correlations

		[qaffas]	GENDER	AGE
Pearson Correlation	[qaffas]	1.000	-.298	-.626
	GENDER	-.298	1.000	.000
	AGE	-.626	.000	1.000
Sig. (1-tailed)	[qaffas]	.	.020	.000
	SEX	.020	.	.500
	AGE	.000	.500	.
N	[qaffas]	48	48	48
	SEX	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.
b. Dependent Variable: [qaffas]

Model Summary

Model					Change Statistics		
	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.894[a]	.681	.658	.364	.681	20.848	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.000

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.521	2	2.760	20.848	.000[a]
	Residual	5.958	45	.132		
	Total	11.479	47			

a. Predictors: (Constant), AGE, GENDER
b. Dependent Variable: [qaffas]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.583	.210		7.537	.000
	GENDER	-.292	.105	-.298	-2.777	.008
	AGE	-.375	.064	-.626	-5.830	.000

a. Dependent Variable: [qaffas]

Coefficients[a]

Model		95.0% Confidence Interval for B		Correlations		
		Lower Bound	Upper Bound	Zero-order	Partial	Part
1	(Constant)	1.160	2.006			
	GENDER	-.503	-.080	-.298	-.382	-.298
	AGE	-.505	-.245	-.626	-.656	-.626

a. Dependent Variable: [qaffas]

Correlations

		[nasab]	GENDER	AGE
Pearson Correlation	[nasab]	1.000	.169	.155
	GENDER	.169	1.000	.000
	AGE	.155	.000	1.000
Sig. (1-tailed)	[nasab]	.	.125	.146
	GENDER	.125	.	.500
	AGE	.146	.500	.
N	[nasab]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: [nasab]

Model Summary

Model					Change Statistics		
	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.230[a]	.053	.011	.496	.053	1.251	2

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics: R Square Change	Change Statistics: F Change	Change Statistics: df1
1	.230[a]	.053	.011	.496	.053	1.251	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics: df2	Change Statistics: Sig. F Change
1	45	.296

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.615	2	.307	1.251	.296[a]
	Residual	11.052	45	.246		
	Total	11.667	47			

a. Predictors: (Constant), AGE, GENDER

b. Dependent Variable: [nasab]

Coefficients[a]

Model		Unstandardized Coefficients: B	Unstandardized Coefficients: Std. Error	Standardized Coefficients: Beta	t	Sig.
1	(Constant)	-.021	.286		-.073	.942
	GENDER	.167	.143	.169	1.165	.250
	AGE	.094	.088	.155	1.070	.290

a. Dependent Variable: [nasab]

Coefficients[a]

Model		95.0% Confidence Interval for B: Lower Bound	95.0% Confidence Interval for B: Upper Bound	Correlations: Zero-order	Correlations: Partial	Correlations: Part
1	(Constant)	-.597	.555			
	GENDER	-.121	.455	.169	.171	.169
	AGE	-.083	.270	.155	.158	.155

a. Dependent Variable: [nasab]

Correlations

		[ghashash]	GENDER	AGE
Pearson Correlation	[ghashash]	1.000	.160	.588
	GENDER	.160	1.000	.000
	AGE	.588	.000	1.000
Sig. (1-tailed)	[ghashash]	.	.138	.000
	GENDER	.138	.	.500

	AGE	.000	.500	.
N	[ghashash]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: [ghashash]

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	.810[a]	.672	.444	.320	.472	13.316	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.000

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.719	2	1.359	13.316	.000[a]
	Residual	4.594	45	.102		
	Total	7.313	47			

a. Predictors: (Constant), AGE, GENDER

b. Dependent Variable: [ghashash]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.563	.184		-3.049	.004
	GENDER	.125	.092	.160	1.355	.082
	AGE	.281	.056	.588	4.980	.000

a. Dependent Variable: [ghashash]

Coefficients[a]

Model		95.0% Confidence Interval for B		Correlations		
		Lower Bound	Upper Bound	Zero-order	Partial	Part
1	(Constant)	-.934	-.191			
	GENDER	-.061	.311	.160	.198	.160
	AGE	.167	.395	.588	.596	.588

a. Dependent Variable: [ghashash]

4. VARIABLE 4

Descriptive Statistics

	Mean	Std. Deviation	N
GENDER	1.50	.505	48
AGE	2.00	.825	48
[tahshish]	.67	.476	48
[tasnif]	.33	.476	48

Correlations

		GENDER	AGE	[tahshish]	[tasnif]
GENDER	Pearson Correlation	1	.000	-.177	.177
	Sig. (2-tailed)		1.000	.229	.229
	N	48	48	48	48
AGE	Pearson Correlation	.000	1	-.650**	.650**
	Sig. (2-tailed)	1.000		.000	.000
	N	48	48	48	48
[tahshish]	Pearson Correlation	-.177	-.650**	1	-.125
	Sig. (2-tailed)	.229	.000		.360
	N	48	48	48	48
[tasnif]	Pearson Correlation	.177	.650**	-.125	1
	Sig. (2-tailed)	.229	.000	.360	
	N	48	48	48	48

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

Control Variables			GENDER	[tahshish]	[tasnif]
AGE	GENDER	Correlation	1.000	-.232	.232
		Significance (2-tailed)	.	.116	.116
		df	0	45	45
	[tahshish]	Correlation	-.232	1.000	-1.000
		Significance (2-tailed)	.116	.	.000
		df	45	0	45
	[tasnif]	Correlation	.232	-1.000	1.000
		Significance (2-tailed)	.116	.000	.

Correlations

		GENDER	AGE	[tahshish]	[tasnif]
GENDER	Pearson Correlation	1	.000	-.177	.177
	Sig. (2-tailed)		1.000	.229	.229
	N	48	48	48	48
AGE	Pearson Correlation	.000	1	-.650**	.650**
	Sig. (2-tailed)	1.000		.000	.000
	N	48	48	48	48
[tahshish]	Pearson Correlation	-.177	-.650**	1	-.125
	Sig. (2-tailed)	.229	.000		.360
	N	48	48	48	48
[tasnif]	Pearson Correlation	.177	.650**	-.125	1
	Sig. (2-tailed)	.229	.000	.360	
	N	48	48	48	48
	df		45	45	0

Correlations

Control Variables			[tahshish]	[tasnif]	AGE
GENDER	[tahshish]	Correlation	1.000	-1.000	-.660
		Significance (2-tailed)	.	.000	.000
		df	0	45	45
	[tasnif]	Correlation	-1.000	1.000	.660
		Significance (2-tailed)	.000	.	.000
		df	45	0	45
	AGE	Correlation	-.660	.660	1.000
		Significance (2-tailed)	.000	.000	.
		df	45	45	0

Correlations

		[tahshish]	GENDER	AGE
Pearson Correlation	[tahshish]	1.000	-.177	-.650
	GENDER	-.177	1.000	.000
	AGE	-.650	.000	1.000
Sig. (1-tailed)	[tahshish]	.	.115	.000
	GENDER	.115	.	.500
	AGE	.000	.500	.
N	[tahshish]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: [tahshish]

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	.973[a]	.753	.629	.360	.653	18.643	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.000

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.833	2	2.417	18.643	.000[a]
	Residual	5.833	45	.130		
	Total	10.667	47			

a. Predictors: (Constant), AGE, GENDER
b. Dependent Variable: [tahshish]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.667	.208		8.018	.000
	GENDER	-.167	.104	-.177	-1.604	.116
	AGE	-.375	.064	-.650	-5.892	.000

a. Dependent Variable: [tahshish]

Coefficients[a]

Model		Correlations		
		Zero-order	Partial	Part
1	(Constant)			
	GENDER	-.177	-.232	-.177
	AGE	-.650	-.660	-.650

a. Dependent Variable: [tahshish]

Correlations

		[tasnif]	GENDER	AGE
Pearson Correlation	[tasnif]	1.000	.177	.650
	GENDER	.177	1.000	.000
	AGE	.650	.000	1.000
Sig. (1-tailed)	[tasnif]	.	.115	.000
	GENDER	.115	.	.500
	AGE	.000	.500	.
N	[tasnif]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.
b. Dependent Variable: [tasnif]

Model Summary

Model				Change Statistics		
	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.673[a]	.453	.429	.360	.453	18.643	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.000

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.833	2	2.417	18.643	.000[a]
	Residual	5.833	45	.130		
	Total	10.667	47			

a. Predictors: (Constant), AGE, GENDER
b. Dependent Variable: [tasnif]

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.667	.208		-3.207	.002
	GENDER	.167	.104	.177	1.604	.116
	AGE	.375	.064	.650	5.892	.000
a. Dependent Variable: [tasnif]						

Coefficients[a]				
Model		Correlations		
		Zero-order	Partial	Part
1	(Constant)			
	GENDER	.177	.232	.177
	AGE	.650	.660	.650
a. Dependent Variable: [tasnif]				

5. VARIABLE 5

Descriptive Statistics			
	Mean	Std. Deviation	N
GENDER	1.50	.505	48
AGE	2.00	.825	48
[kiki]	.60	.494	48
[style]	.23	.425	48
[modern]	.17	.377	48

Correlations							
Control Variables			GENDER	[kiki]	[style]	[modern]	AGE
none[a]	GENDER	Correlation	1.000	-.469	.349	.447	.000
		Significance (2-tailed)	.	.001	.010	.001	1.000
		df	0	46	46	46	46
	[kiki]	Correlation	-.469	1.000	-.674	-.553	-.465
		Significance (2-tailed)	.001	.	.230	.310	.001
		df	46	0	46	46	46
	[style]	Correlation	.349	-.674	1.000	-.244	.121
		Significance (2-tailed)	.010	.000	.	.095	.411
		df	46	46	0	46	46
	[modern]	Correlation	.447	-.553	-.244	1.000	.342

		Significance (2-tailed)	.001	.000	.095	.	.017
		df	46	46	46	0	46
	AGE	Correlation	.000	-.465	.121	.342	1.000
		Significance (2-tailed)	1.000	.001	.411	.017	.
		df	46	46	46	46	0
AGE	GENDER	Correlation	1.000	-.503	.349	.476	
		Significance (2-tailed)	.	.000	.010	.001	
		df	0	45	45	45	
	[kiki]	Correlation	-.503	1.000	-.681	-.489	
		Significance (2-tailed)	.000	.	.000	.000	
		df	45	0	45	45	
	[style]	Correlation	.349	-.681	1.000	-.306	
		Significance (2-tailed)	.010	.000	.	.036	
		df	45	45	0	45	
	[modern]	Correlation	.476	-.489	-.306	1.000	
		Significance (2-tailed)	.001	.000	.036	.	
		df	45	45	45	0	

a. Cells contain zero-order (Pearson) correlations.

Correlations

Control Variables			[kiki]	[style]	[modern]	AGE	GENDER
-none-[a]	[kiki]	Correlation	1.000	-.674	-.553	-.465	-.469
		Significance (2-tailed)	.	.000	.000	.001	.001
		df	0	46	46	46	46
	[style]	Correlation	-.674	1.000	-.244	.121	.349
		Significance (2-tailed)	.000	.	.095	.411	.010
		df	46	0	46	46	46
	[modern]	Correlation	-.553	-.244	1.000	.342	.447
		Significance (2-tailed)	.000	.095	.	.017	.001
		df	46	46	0	46	46
	AGE	Correlation	-.465	.121	.342	1.000	.000
		Significance (2-tailed)	.001	.411	.017	.	1.000
		df	46	46	46	0	46
	GENDER	Correlation	-.469	.349	.447	.000	1.000
		Significance (2-tailed)	.001	.010	.001	1.000	.
		df	46	46	46	46	0

GENDER	[kiki]	Correlation	1.000	-.691	-.434	-.413
		Significance (2-tailed)	.	.000	.002	.004
		df	0	45	45	45
	[style]	Correlation	-.691	1.000	-.351	.123
		Significance (2-tailed)	.000	.	.016	.411
		df	45	0	45	45
	[modern]	Correlation	-.434	-.351	1.000	.383
		Significance (2-tailed)	.002	.016	.	.008
		df	45	45	0	45
	AGE	Correlation	-.413	.123	.383	1.000
		Significance (2-tailed)	.004	.411	.008	.
		df	45	45	45	0

a. Cells contain zero-order (Pearson) correlations.

Correlations

		[kiki]	GENDER	AGE
Pearson Correlation	[kiki]	1.000	-.469	-.365
	GENDER	-.469	1.000	.000
	AGE	-.365	.000	1.000
Sig. (1-tailed)	[kiki]	.	.000	.005
	GENDER	.000	.	.500
	AGE	.005	.500	.
N	[kiki]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Age, GENDER[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: [kiki]

Model Summary

Model					Change Statistics		
	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.694[a]	.453	.424	.406	.453	12.276	2

a. Predictors: (Constant), Age, Gender

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.000

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.052	2	2.026	12.276	.000[a]
	Residual	7.427	45	.165		
	Total	11.479	47			

a. Predictors: (Constant), Age, Gender
b. Dependent Variable: [kiki]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.729	.235		7.372	.000
	Gender	-.458	.117	-.469	-3.908	.000
	Age	-.219	.072	-.365	-3.046	.004

a. Dependent Variable: [kiki]

Coefficients[a]

Model		95.0% Confidence Interval for B		Correlations		
		Lower Bound	Upper Bound	Zero-order	Partial	Part
1	(Constant)	1.257	2.202			
	Gender	-.695	-.222	-.469	-.503	-.469
	Age	-.363	-.074	-.365	-.413	-.365

a. Dependent Variable: [kiki]

Correlations

		[style]	GENDER	AGE
Pearson Correlation	[style]	1.000	.349	.121
	GENDER	.149	.010	.000
	AGE	.121	.430	1.000
Sig. (1-tailed)	[style]	.349	.349	.206
	GENDER	.010	.010	.500
	AGE	.206	.500	.
N	[style]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.
b. Dependent Variable: [style]

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics: R Square Change	Change Statistics: F Change	Change Statistics: df1
1	.192[a]	.037	-.006	.426	.037	.861	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics: df2	Change Statistics: Sig. F Change
1	45	.430

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.313	2	.156	.861	.430[a]
	Residual	8.167	45	.181		
	Total	8.479	47			

a. Predictors: (Constant), AGE, GENDER
b. Dependent Variable: [style]

Coefficients[a]

Model		Unstandardized Coefficients: B	Unstandardized Coefficients: Std. Error	Standardized Coefficients: Beta	t	Sig.
1	(Constant)	-.083	.246		-.339	.736
	GENDER	.125	.123	.149	1.016	.315
	AGE	.063	.075	.121	.830	.411

a. Dependent Variable: [style]

Coefficients[a]

Model	95.0% Confidence Interval for B: Lower Bound	95.0% Confidence Interval for B: Upper Bound	Correlations: Zero-order	Correlations: Partial	Correlations: Part

1	(Constant)	-.579	.412			
	GENDER	-.123	.373	.149	.150	.149
	AGE	-.089	.214	.121	.123	.121

a. Dependent Variable: [style]

Correlations

		[modern]	GENDER	AGE
Pearson Correlation	[modern]	1.000	.447	.342
	GENDER	.447	1.000	.000
	AGE	.342	.000	1.000
Sig. (1-tailed)	[modern]	.	.001	.009
	GENDER	.001	.	.500
	AGE	.009	.500	.
N	[modern]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: [modern]

Model Summary

Model					Change Statistics		
	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.763[a]	.517	.487	.418	.417	10.452	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.000

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.115	2	1.057	10.452	.000[a]
	Residual	4.552	45	.101		
	Total	6.667	47			

a. Predictors: (Constant), AGE, GENDER

b. Dependent Variable: [modern]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.646	.184		-3.517	.001
	GENDER	.333	.092	.447	3.631	.001
	AGE	.156	.056	.342	2.779	.008

a. Dependent Variable: [modern]

Coefficients[a]

Model		95.0% Confidence Interval for B		Correlations		
		Lower Bound	Upper Bound	Zero-order	Partial	Part
1	(Constant)	-1.016	-.276			
	GENDER	.148	.518	.447	.476	.447
	AGE	.043	.269	.342	.383	.342

a. Dependent Variable: [modern]

6.VARIABLE 6

Descriptive Statistics

	Mean	Std. Deviation	N
GENDER	1.50	.505	48
AGE	2.00	.825	48
[hata]	.67	1.038	48
[jamila]	.31	.468	48
[hilwa]	.54	.504	48

Correlations

		GENDER	AGE	[hata]	[jamila]	[hilwa]
GENDER	Pearson Correlation	1	.000	.162	.045	.251
	Sig. (2-tailed)		1.000	.271	.762	.085
	N	48	48	48	48	48
AGE	Pearson Correlation	.000	1	.547**	.440**	-.051
	Sig. (2-tailed)	1.000		.001	.002	.730
	N	48	48	48	48	48
[hata]	Pearson Correlation	.162	.547*	1	.000	-.095
	Sig. (2-tailed)	.271	.001		1.000	.521
	N	48	48	48	48	48
[jamila]	Pearson Correlation	.045	.440*	.000	1	-.256
	Sig. (2-tailed)	.762	.002	1.000		.371
	N	48	48	48	48	48
[hilwa]	Pearson Correlation	.251	-.051	-.095	-.256	1
	Sig. (2-tailed)	.085	.730	.521	.371	
	N	48	48	48	48	48

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

Control Variables			GENDER	[hata]	[jamila]	[hilwa]
AGE	GENDER	Correlation	1.000	.181	.050	.251
		Significance (2-tailed)	.	.222	.738	.089
		df	0	45	45	45
	[hata]	Correlation	.181	1.000	-.245	-.081
		Significance (2-tailed)	.222	.	.097	.590
		df	45	0	45	45
	[jamila]	Correlation	.050	-.245	1.000	-.792
		Significance (2-tailed)	.738	.097	.	.000
		df	45	45	0	45
	[hilwa]	Correlation	.251	-.081	-.792	1.000
		Significance (2-tailed)	.089	.590	.000	.

Correlations

Control Variables			GENDER	[hata]	[jamila]	[hilwa]
AGE	GENDER	Correlation	1.000	.181	.050	.251
		Significance (2-tailed)	.	.222	.738	.089
		df	0	45	45	45
	[hata]	Correlation	.181	1.000	-.245	-.081
		Significance (2-tailed)	.222	.	.097	.590
		df	45	0	45	45
	[jamila]	Correlation	.050	-.245	1.000	-.792
		Significance (2-tailed)	.738	.097	.	.000
		df	45	45	0	45
	[hilwa]	Correlation	.251	-.081	-.792	1.000
		Significance (2-tailed)	.089	.590	.000	.
		df	45	45	45	0

Correlations

Control Variables			[hata]	[jamila]	[hilwa]	AGE
GENDER	[hata]	Correlation	1.000	-.007	-.142	.453
		Significance (2-tailed)	.	.961	.341	.001
		df	0	45	45	45
	[jamila]	Correlation	-.007	1.000	-.770	.441
		Significance (2-tailed)	.961	.	.000	.002
		df	45	0	45	45
	[hilwa]	Correlation	-.142	-.770	1.000	-.053
		Significance (2-tailed)	.341	.000	.	.724
		df	45	45	0	45
	AGE	Correlation	.453	.441	-.053	1.000
		Significance (2-tailed)	.001	.002	.724	.
		df	45	45	45	0

Correlations

		[hata]	GENDER	AGE
Pearson Correlation	[hata]	1.000	.162	.447
	GENDER	.162	1.000	.000
	AGE	.447	.000	1.000
Sig. (1-tailed)	[hata]	.	.135	.001
	GENDER	.135	.	.500
	AGE	.001	.500	.
N	[hata]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: [hata]

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	.876[a]	.626	.492	.933	.426	6.575	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.003

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.458	2	5.729	6.575	.002[a]
	Residual	39.208	45	.871		
	Total	50.667	47			

a. Predictors: (Constant), Age, Gender

b. Dependent Variable: [hata]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.958	.539		-1.778	.082
	GENDER	.333	.269	.162	1.237	.222
	AGE	.563	.165	.547	3.409	.001

a. Dependent Variable: [hata]

Coefficients[a]

Model		Correlations		
		Zero-order	Partial	Part
1	(Constant)			
	GENDER	.162	.181	.162
	AGE	.547	.553	.547

a. Dependent Variable: [hata]

Descriptive Statistics

	Mean	Std. Deviation	N
[jamila]	.31	.468	48
GENDER	1.50	.505	48
AGE	2.00	.825	48

Correlations

		[jamila]	GENDER	AGE
Pearson Correlation	[jamila]	1.000	.045	.440
	GENDER	.045	1.000	.000
	AGE	.440	.000	1.000
Sig. (1-tailed)	[jamila]	.	.381	.001
	GENDER	.381	.	.500
	AGE	.001	.500	.
N	[jamila]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: [jamila]

Model Summary

Model					Change Statistics		
	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.743[a]	.596	.560	.429	.596	5.484	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.002

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.021	2	1.010	5.484	.002[a]
	Residual	8.292	45	.184		
	Total	10.313	47			

a. Predictors: (Constant), AGE, GENDER

b. Dependent Variable: [jamila]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.250	.248		-1.009	.318
	GENDER	.042	.124	.045	.336	.738
	AGE	.250	.076	.440	3.295	.002

a. Dependent Variable: [jamila]

Coefficients[a]

Model		Correlations		
		Zero-order	Partial	Part
1	(Constant)			
	GENDER	.045	.050	.045
	AGE	.440	.441	.440

a. Dependent Variable: [jamila]

Descriptive Statistics

	Mean	Std. Deviation	N
[hilwa]	.54	.504	48
GENDER	1.50	.505	48
AGE	2.00	.825	48

Correlations

		[hilwa]	GENDER	AGE
Pearson Correlation	[hilwa]	1.000	.251	-.051
	GENDER	.251	1.000	.000
	AGE	-.051	.000	1.000
Sig. (1-tailed)	[hilwa]	.	.043	.365
	GENDER	.043	.	.500
	AGE	.365	.500	.
N	[hilwa]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: [hilwa]

Model Summary

Model					Change Statistics		
	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.256[a]	.066	.024	.497	.066	1.579	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.217

ANOVAb

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.781	2	.391	1.579	.217[a]
	Residual	11.135	45	.247		
	Total	11.917	47			

a. Predictors: (Constant), AGE, GENDER

b. Dependent Variable: [hilwa]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.229	.287		.798	.429
	GENDER	.250	.144	.251	1.741	.089
	AGE	-.031	.088	-.051	-.355	.724

a. Dependent Variable: [hilwa]

Coefficients[a]

Model		Correlations		
		Zero-order	Partial	Part
1	(Constant)			
	GENDER	.251	.251	.251
	AGE	-.051	-.053	-.051

a. Dependent Variable: [hilwa]

7. VARIABLE 7

Descriptive Statistics

	Mean	Std. Deviation	N
GENDER	1.50	.505	48
AGE	2.00	.825	48
[ahsant]	.52	.505	48
[jayyid]	.04	.202	48
[afya]	.44	.501	48

Correlations

		GENDER	AGE	[ahsant]	[jayyid]	[afya]
GENDER	Pearson Correlation	1	.000	-.459**	.209	.378**
	Sig. (2-tailed)		1.000	.001	.155	.008
	N	48	48	48	48	48
AGE	Pearson Correlation	.000	1	-.360*	.255	.255
	Sig. (2-tailed)	1.000		.012	.080	.080
	N	48	48	48	48	48
[ahsant]	Pearson Correlation	-.459**	-.360*	1	-.217	-.619
	Sig. (2-tailed)	.001	.012		.138	.033
	N	48	48	48	48	48
[jayyid]	Pearson Correlation	.209	.255	-.217	1	-.184
	Sig. (2-tailed)	.155	.080	.138		.211
	N	48	48	48	48	48
[afya]	Pearson Correlation	.378**	.255	-.619	-.184	1
	Sig. (2-tailed)	.008	.080	.033	.211	
	N	48	48	48	48	48

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Correlations

Control Variables			GENDER	[ahsant]	[jayyid]	[afya]
AGE	GENDER	Correlation	1.000	-.474	.216	.405
		Significance (2-tailed)	.	.001	.145	.005
		df	0	45	45	45
	[ahsant]	Correlation	-.474	1.000	-.302	-.917
		Significance (2-tailed)	.001	.	.039	.000
		df	45	0	45	45
	[jayyid]	Correlation	.216	-.302	1.000	-.102
		Significance (2-tailed)	.145	.039	.	.495
		df	45	45	0	45
	[afya]	Correlation	.405	-.917	-.102	1.000
		Significance (2-tailed)	.005	.000	.495	.
		df	45	45	45	0

Correlations

Control Variables			[ahsant]	[jayyid]	[afya]	AGE
GENDER	[ahsant]	Correlation	1.000	-.140	-.907	.287
		Significance (2-tailed)	.	.348	.000	.050
		df	0	45	45	45
	[jayyid]	Correlation	-.140	1.000	-.290	.261
		Significance (2-tailed)	.348	.	.048	.076
		df	45	0	45	45
	[afya]	Correlation	-.907	-.290	1.000	-.389
		Significance (2-tailed)	.000	.048	.	.007
		df	45	45	0	45
	AGE	Correlation	.287	.261	-.389	1.000
		Significance (2-tailed)	.050	.076	.007	.
		df	45	45	45	0

Correlations

		[ahsant]	GENDER	AGE
Pearson Correlation	[ahsant]	1.000	-.459	.255
	GENDER	-.459	1.000	.000
	AGE	.255	.000	1.000
Sig. (1-tailed)	[ahsant]	.	.001	.040
	GENDER	.001	.	.500
	AGE	.040	.500	.
N	[ahsant]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: [ahsant]

Model Summary

Model					Change Statistics		
	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.825[a]	.676	.543	.439	.576	8.562	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.001

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.302	2	1.651	8.562	.001[a]
	Residual	8.677	45	.193		
	Total	11.979	47			

a. Predictors: (Constant), AGE, GENDER

b. Dependent Variable: [ahsant]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.896	.254		3.534	.001
	GENDER	-.458	.127	-.459	-3.616	.001
	AGE	.156	.078	.255	2.013	.050

a. Dependent Variable: [ahsant]

Coefficients[a]

Model		Correlations		
		Zero-order	Partial	Part
1	(Constant)			
	GENDER	-.459	-.474	-.459
	AGE	.255	.287	.255

a. Dependent Variable: [ahsant]

Correlations

		[jayyid]	GENDER	AGE
Pearson Correlation	[jayyid]	1.000	.209	.255
	GENDER	.209	1.000	.000
	AGE	.255	.000	1.000
Sig. (1-tailed)	[jayyid]	.	.077	.040

	GENDER	.077	.	.500
	AGE	.040	.500	.
N	[jayyid]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: [jayyid]

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	.330[a]	.109	.069	.195	.109	2.744	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.075

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.208	2	.104	2.744	.075[a]
	Residual	1.708	45	.038		
	Total	1.917	47			

a. Predictors: (Constant), AGE, GENDER

b. Dependent Variable: [jayyid]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.208	.112		-1.852	.071
	GENDER	.083	.056	.209	1.482	.145

AGE	.063	.034	.255	1.815	.076

a. Dependent Variable: [jayyid]

Coefficients[a]

Model		Correlations		
		Zero-order	Partial	Part
1	(Constant)			
	GENDER	.209	.216	.209
	AGE	.255	.261	.255

a. Dependent Variable: [jayyid]

Correlations

		[afya]	GENDER	AGE
Pearson Correlation	[afya]	1.000	.378	-.360
	GENDER	.378	1.000	.000
	AGE	-.360	.000	1.000
Sig. (1-tailed)	[afya]	.	.004	.006
	GENDER	.004	.	.500
	AGE	.006	.500	.
N	[afya]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: [afya]

Model Summary

Model					Change Statistics		
	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.622[a]	.472	.340	.437	.372	8.427	2

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	.622[a]	.472	.340	.437	.372	8.427	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.001

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.219	2	1.609	8.427	.001[a]
	Residual	8.594	45	.191		
	Total	11.812	47			

a. Predictors: (Constant), AGE, GENDER

b. Dependent Variable: [afya]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.313	.252		1.239	.222
	GENDER	.375	.126	.378	2.973	.004
	AGE	-.219	.077	-.360	-2.832	.027

a. Dependent Variable: [afya]

Coefficients[a]

Model		Correlations		
		Zero-order	Partial	Part
1	(Constant)			
	GENDER	.378	.405	.378
	AGE	-.360	-.389	-.360

a. Dependent Variable: [afya]

8. VARIABLE 8

Descriptive Statistics

	Mean	Std. Deviation	N
GENDER	1.50	.505	48
AGE	2.00	.825	48
[mu'mmam]	.52	.505	48
[rajuldeen]	.04	.202	48
[sheik/Sayyid]	.44	.501	48

Correlations

		GENDER	AGE	[mu'mmam]	[rajuldeen]	[sheik/Sayyid]
GENDER	Pearson Correlation	1	.000	-.459**	.209	.378**
	Sig. (2-tailed)		1.000	.001	.155	.008
	N	48	48	48	48	48
AGE	Pearson Correlation	.000	1	.365*	.255	-.360*
	Sig. (2-tailed)	1.000		.010	.080	.012
	N	48	48	48	48	48
[mu'mmam]	Pearson Correlation	-.459**	.365*	1	-.217	-.112
	Sig. (2-tailed)	.001	.010		.138	.330
	N	48	48	48	48	48
[rajuldeen]	Pearson Correlation	.209	.255	-.217	1	-.184
	Sig. (2-tailed)	.155	.080	.138		.211
	N	48	48	48	48	48
[sheik/Sayyid]	Pearson Correlation	.378**	-.360*	-.112	-.184	1
	Sig. (2-tailed)	.008	.012	.330	.211	
	N	48	48	48	48	48

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

		GENDER	AGE	[mu'mmam]
GENDER	Pearson Correlation	1	.000	-.459**
	Sig. (2-tailed)		1.000	.001
	N	48	48	48
AGE	Pearson Correlation	.000	1	.365*

	Sig. (2-tailed)	1.000		.010
	N	48	48	48
[mu'mmam]	Pearson Correlation	-.459**	.365*	1
	Sig. (2-tailed)	.001	.010	
	N	48	48	48

Correlations

Control Variables			GENDER	[mu'mmam]	[rajuldeen]	[sheik/Sayyid]
AGE	GENDER	Correlation	1.000	-.474	.216	.405
		Significance (2-tailed)	.	.001	.145	.005
		df	0	45	45	45
	[mu'mmam]	Correlation	-.474	1.000	-.302	-.917
		Significance (2-tailed)	.001	.	.039	.000
		df	45	0	45	45
	[rajuldeen]	Correlation	.216	-.302	1.000	-.102
		Significance (2-tailed)	.145	.039	.	.495
		df	45	45	0	45
	[sheik/Sayyid]	Correlation	.405	-.917	-.102	1.000
		Significance (2-tailed)	.005	.000	.495	.
		df	45	45	45	0

Correlations

Control Variables			[mu'mmam]	[rajuldeen]	[sheik/Sayyid]	AGE
GENDER	[mu'mmam]	Correlation	1.000	-.140	-.907	.365*
		Significance (2-tailed)	.	.348	.000	.010
		df	0	45	45	45
	[rajuldeen]	Correlation	-.140	1.000	-.290	.261
		Significance (2-tailed)	.348	.	.048	.076
		df	45	0	45	45
	[sheik/Sayyid]	Correlation	-.907	-.290	1.000	-.389
		Significance (2-tailed)	.000	.048	.	.007
		df	45	45	0	45
	AGE	Correlation	.365*	.261	-.389	1.000
		Significance (2-tailed)	.010	.076	.007	.
		df	45	45	45	0

Descriptive Statistics

	Mean	Std. Deviation	N
[mu'mmam]	.52	.505	48
GENDER	1.50	.505	48
AGE	2.00	.825	48

Correlations

		[mu'mmam]	GENDER	AGE
Pearson Correlation	[mu'mmam]	1.000	-.459	.365
	GENDER	-.459	1.000	.000
	AGE	.255	.000	1.000
Sig. (1-tailed)	[mu'mmam]	.	.001	.040
	GENDER	.001	.	.500
	AGE	.010	.500	.
N	[mu'mmam]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: [mu'mmam]

Model Summary

Model					Change Statistics		
	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.525[a]	.276	.243	.439	.276	8.562	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.001

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.302	2	1.651	8.562	.001[a]
	Residual	8.677	45	.193		
	Total	11.979	47			

a. Predictors: (Constant), AGE, GENDER
b. Dependent Variable: [mu'mmam]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.896	.254		3.534	.001
	GENDER	-.458	.127	-.459	-3.616	.001
	AGE	.156	.078	.255	2.013	.050

a. Dependent Variable: [mu'mmam]

Coefficients[a]

Model		Correlations		
		Zero-order	Partial	Part
1	(Constant)			
	GENDER	-.459	-.474	-.459
	AGE	.255	.287	.255

a. Dependent Variable: [mu'mmam]

Correlations

		[rajuldeen]	GENDER	AGE
Pearson Correlation	[rajuldeen]	1.000	.209	.255
	GENDER	.209	1.000	.000
	AGE	.255	.000	1.000
Sig. (1-tailed)	[rajuldeen]	.	.077	.040
	GENDER	.077	.	.500
	AGE	.040	.500	.
N	[rajuldeen]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.
b. Dependent Variable: [rajuldeen]

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics: R Square Change	Change Statistics: F Change	Change Statistics: df1
1	.330[a]	.109	.069	.195	.109	2.744	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics: df2	Change Statistics: Sig. F Change
1	45	.075

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.208	2	.104	2.744	.075[a]
	Residual	1.708	45	.038		
	Total	1.917	47			

a. Predictors: (Constant), AGE, GENDER
b. Dependent Variable: [rajuldeen]

Coefficients[a]

Model		Unstandardized Coefficients: B	Unstandardized Coefficients: Std. Error	Standardized Coefficients: Beta	t	Sig.
1	(Constant)	-.208	.112		-1.852	.071
	GENDER	.083	.056	.209	1.482	.145
	AGE	.063	.034	.255	1.815	.076

a. Dependent Variable: [rajuldeen]

Coefficients[a]

Model		Correlations: Zero-order	Correlations: Partial	Correlations: Part
1	(Constant)			
	GENDER	.209	.216	.209
	AGE	.255	.261	.255

a. Dependent Variable: [rajuldeen]

Correlations

		[sheik/Sayyid]	GENDER	AGE
Pearson Correlation	[sheik/Sayyid]	1.000	.378	-.360
	GENDER	.378	1.000	.000
	AGE	-.360	.000	1.000

Sig. (1-tailed)	[sheik/Sayyid]	.	.004	.006
	GENDER	.004	.	.500
	AGE	.006	.500	.
N	[sheik/Sayyid]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: [sheik/Sayyid]

Model Summary

Model					Change Statistics		
	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.522[a]	.272	.240	.437	.272	8.427	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.001

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.219	2	1.609	8.427	.001[a]
	Residual	8.594	45	.191		
	Total	11.812	47			

a. Predictors: (Constant), AGE, GENDER

b. Dependent Variable: [sheik/Sayyid]

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.

1	(Constant)	.313	.252		1.239	.222
	GENDER	.375	.126	.378	2.973	.005
	AGE	-.219	.077	-.360	-2.832	.007

a. Dependent Variable: [sheik/Sayyid]

Coefficients[a]

Model		Correlations		
		Zero-order	Partial	Part
1	(Constant)			
	GENDER	.378	.405	.378
	AGE	-.360	-.389	-.360

a. Dependent Variable: [sheik/Sayyid]

9. VARIABLE 9

Descriptive Statistics

	Mean	Std. Deviation	N
GENDER	1.50	.505	48
AGE	2.00	.825	48
[mawlai]	1.58	.498	48

Correlations

		GENDER	AGE	[mawlai]
GENDER	Pearson Correlation	1	.023	.507**
	Sig. (2-tailed)		.770	.000
	N	48	48	48
AGE	Pearson Correlation	.023	1	-.104
	Sig. (2-tailed)	.770		.484
	N	48	48	48
[mawlai]	Pearson Correlation	.507**	-.104	1
	Sig. (2-tailed)	.000	.484	
	N	48	48	48

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

Control Variables			GENDER	[mawlai]
AGE	GENDER	Correlation	1.000	.510
		Significance (2-tailed)	.	.000
		df	0	45
	[mawlai]	Correlation	.510	1.000
		Significance (2-tailed)	.000	.

Correlations

Control Variables			GENDER	[mawlai]
AGE	GENDER	Correlation	1.000	.510
		Significance (2-tailed)	.	.000
		df	0	45
	[mawlai]	Correlation	.510	1.000
		Significance (2-tailed)	.000	.
		df	45	0

Correlations

Control Variables			[mawlai]	AGE
GENDER	[mawlai]	Correlation	1.000	-.120
		Significance (2-tailed)	.	.421
		df	0	45
	AGE	Correlation	-.120	1.000
		Significance (2-tailed)	.421	.
		df	45	0

Descriptive Statistics

	Mean	Std. Deviation	N
[mawlai]	1.58	.498	48
GENDER	1.50	.505	48
AGE	2.00	.825	48

Correlations

		[mawlai]	GENDER	AGE
Pearson Correlation	[mawlai]	1.000	.507	-.104
	GENDER	.507	1.000	.000
	AGE	-.104	.000	1.000
Sig. (1-tailed)	[mawlai]	.	.000	.242
	GENDER	.000	.	.500
	AGE	.242	.500	.
N	[mawlai]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.
b. Dependent Variable: [mawlai]

Model Summary

Model					Change Statistics		
	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.718[a]	.568	.435	.436	.468	8.232	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.001

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.125	2	1.562	8.232	.001[a]
	Residual	8.542	45	.190		
	Total	11.667	47			

a. Predictors: (Constant), AGE, GENDER
b. Dependent Variable: [mawlai]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.958	.252		3.810	.000
	GENDER	.500	.126	.507	3.976	.000
	AGE	-.062	.077	-.104	-.812	.421

a. Dependent Variable: [mawlai]

Coefficients[a]

Model		Correlations		
		Zero-order	Partial	Part
1	(Constant)			
	GENDER	.507	.510	.507
	AGE	-.104	-.120	-.104

a. Dependent Variable: [mawlai]

10. VARIABLE 10

Descriptive Statistics

	Mean	Std. Deviation	N
GENDER	1.50	.505	48
[sahwa]	.71	.459	48
[musallahin]	.08	.279	48
[irhabiyin]	.21	.410	48
AGE	2.00	.825	48

Correlations

		GENDER	AGE	[sahwa]	[musallahin]	[irhabiyin]
GENDER	Pearson Correlation	1	.000	-.458**	.302*	.448**
	Sig. (2-tailed)		1.000	.001	.037	.001
	N	48	48	48	48	48
AGE	Pearson Correlation	.000	1	.337*	-.369**	-.126
	Sig. (2-tailed)	1.000		.019	.010	.395
	N	48	48	48	48	48
[sahwa]	Pearson Correlation	-.458**	.337*	1	-.156	-.121
	Sig. (2-tailed)	.001	.019		.301	.320
	N	48	48	48	48	48
[musallahin]	Pearson Correlation	.302*	-.369*	-.156	1	-.155
	Sig. (2-tailed)	.037	.010	.301		.294
	N	48	48	48	48	48
[irhabiyin]	Pearson Correlation	.448**	-.126	-.121	-.155	1
	Sig. (2-tailed)	.001	.395	.320	.294	
	N	48	48	48	48	48

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Correlations

Control Variables			GENDER	[sahwa]	[musallahin]	[irhabiyin]
AGE	GENDER	Correlation	1.000	-.487	.324	.448
		Significance (2-tailed)	.	.001	.026	.001
		df	0	45	45	45
	[sahwa]	Correlation	-.487	1.000	-.395	-.811
		Significance (2-tailed)	.001	.	.006	.000
		df	45	0	45	45
	[musallahin]	Correlation	.324	-.395	1.000	-.218
		Significance (2-tailed)	.026	.006	.	.141

	df	45	45	0	45
[irhabiyin]	Correlation	.448	-.811	-.218	1.000
	Significance (2-tailed)	.001	.000	.141	.
	df	45	45	45	0

Correlations

Control Variables			[sahwa]	[musallahin]	[irhabiyin]	AGE
GENDER	[sahwa]	Correlation	1.000	-.391	-.779	.379
		Significance (2-tailed)	.	.007	.000	.009
		df	0	45	45	45
	[musallahin]	Correlation	-.391	1.000	-.273	-.387
		Significance (2-tailed)	.007	.	.064	.007
		df	45	0	45	45
	[irhabiyin]	Correlation	-.779	-.273	1.000	-.132
		Significance (2-tailed)	.000	.064	.	.376
		df	45	45	0	45
	AGE	Correlation	.379	-.387	-.132	1.000
		Significance (2-tailed)	.009	.007	.376	.
		df	45	45	45	0

Correlations

		[sahwa]	GENDER	AGE
Pearson Correlation	[sahwa]	1.000	-.458	.337
	GENDER	-.458	1.000	.000
	AGE	.337	.000	1.000
Sig. (1-tailed)	[sahwa]	.	.001	.010
	GENDER	.001	.	.500
	AGE	.010	.500	.
N	[sahwa]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: [sahwa]

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	.769[a]	.524	.493	.386	.424	10.761	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.000

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.208	2	1.604	10.761	.000[a]
	Residual	6.708	45	.149		
	Total	9.917	47			

a. Predictors: (Constant), AGE, GENDER
b. Dependent Variable: [sahwa]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.958	.223		4.299	.000
	GENDER	-.417	.111	-.458	-3.738	.001
	AGE	.188	.068	.337	2.747	.009

a. Dependent Variable: [sahwa]

Coefficients[a]

Model		Correlations		
		Zero-order	Partial	Part
1	(Constant)			
	GENDER	-.458	-.487	-.458
	AGE	.337	.379	.337

a. Dependent Variable: [sahwa]

Correlations

		[musallahin]	GENDER	AGE
Pearson Correlation	[musallahin]	1.000	.302	-.369
	GENDER	.302	1.000	.000

	AGE	-.369	.000	1.000
Sig. (1-tailed)	[musallahin]	.	.019	.005
	GENDER	.019	.	.500
	AGE	.005	.500	.
N	[musallahin]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: [musallahin]

Model Summary

Model					Change Statistics		
	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.277[a]	.027	.093	.251	.027	6.618	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.003

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.833	2	.417	6.618	.323[a]
	Residual	2.833	45	.063		
	Total	3.667	47			

a. Predictors: (Constant), AGE, GENDER

b. Dependent Variable: [musallahin]

Coefficients[a]

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.

		B	Std. Error	Beta		
1	(Constant)	.083	.145		.575	.568
	GENDER	.167	.072	.302	2.301	.026
	AGE	-.125	.044	-.369	-2.818	.007

a. Dependent Variable: [musallahin]

Coefficients[a]

Model		Correlations		
		Zero-order	Partial	Part
1	(Constant)			
	GENDER	.302	.324	.302
	AGE	-.369	-.387	-.369

a. Dependent Variable: [musallahin]

Correlations

		[irhabiyin]	GENDER	AGE
Pearson Correlation	[irhabiyin]	1.000	.448	-.126
	GENDER	.308	.032	.000
	AGE	-.126	.000	1.000
Sig. (1-tailed)	[irhabiyin]	.	.017	.197
	GENDER	.017	.001	.500
	AGE	.197	.500	.
N	[irhabiyin]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: [irhabiyin]

Model Summary

Model	R	R Square	Adjusted R	Std. Error of	Change Statistics

			Square	the Estimate	R Square Change	F Change	df1
1	.632[a]	.411	.471	.396	.411	2.796	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.012

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.875	2	.438	2.796	.012[a]
	Residual	7.042	45	.156		
	Total	7.917	47			

a. Predictors: (Constant), AGE, GENDER

b. Dependent Variable: [irhabiyin]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.042	.228		-.182	.856
	GENDER	.250	.114	.308	2.189	.034
	AGE	-.063	.070	-.126	-.894	.376

a. Dependent Variable: [irhabiyin]

Coefficients[a]

Model		Correlations		
		Zero-order	Partial	Part
1	(Constant)			
	GENDER	.308	.310	.308
	AGE	-.126	-.132	-.126

a. Dependent Variable: [irhabiyin]

11. VARIABLE 11

Descriptive Statistics

	Mean	Std. Deviation	N
GENDER	1.50	.505	48
AGE	2.00	.825	48
[militia]	.44	.501	48
[musallahin]	.35	.483	48
[isabat]	.21	.410	48

Correlations

		GENDER	AGE	[militia]	[musallahin]	[isabat]
GENDER	Pearson Correlation	1	.000	.778**	.044	-.613**
	Sig. (2-tailed)		1.000	.008	.769	.000
	N	48	48	48	48	48
AGE	Pearson Correlation	.000	1	-.316*	-.363*	.166
	Sig. (2-tailed)	1.000		.010	.011	..277
	N	48	48	48	48	48
[militia]	Pearson Correlation	.778**	-.316*	1	-.653	-.452
	Sig. (2-tailed)	.008	.010		.201	.191
	N	48	48	48	48	48
[musallahin]	Pearson Correlation	.044	-.363*	-.653	1	-.380
	Sig. (2-tailed)	.769	.011	.201		.108
	N	48	48	48	48	48
[isabat]	Pearson Correlation	-.513**	-.063	-.452	-.380	1
	Sig. (2-tailed)	.000	.671	.191	.108	
	N	48	48	48	48	48

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

Control Variables			GENDER	[militia]	[musallahin]	[isabat]
AGE	GENDER	Correlation	1.000	.380	.044	-.514
		Significance (2-tailed)	.	.008	.768	.000
		df	0	45	45	45
	[militia]	Correlation	.380	1.000	-.648	-.462
		Significance (2-tailed)	.008	.	.000	.001
		df	45	0	45	45
	[musallahin]	Correlation	.044	-.648	1.000	-.375
		Significance (2-tailed)	.768	.000	.	.009
		df	45	45	0	45
	[isabat]	Correlation	-.514	-.462	-.375	1.000

	Significance (2-tailed)	.000	.001	.009	.
	df	45	45	45	0

Correlations

Control Variables			[militia]	[musallahin]	[isabat]	AGE
GENDER	[militia]	Correlation	1.000	-.724	-.325	-.316*
		Significance (2-tailed)	.	.000	.026	.010
		df	0	45	45	45
	[musallahin]	Correlation	-.724	1.000	-.417	-.363*
		Significance (2-tailed)	.000	.	.004	.011
		df	45	0	45	45
	[isabat]	Correlation	-.325	-.417	1.000	-.073
		Significance (2-tailed)	.026	.004	.	.625
		df	45	45	0	45
	AGE	Correlation	-.316*	.160	-.073	1.000
		Significance (2-tailed)	.010	.282	.625	.
		df	45	45	45	0

Correlations

		[militia]	GENDER	AGE
Pearson Correlation	[militia]	1.000	.378	-.316
	GENDER	.378	1.000	.000
	AGE	-.103	.000	1.000
Sig. (1-tailed)	[militia]	.	.004	.243
	GENDER	.004	.	.010
	AGE	.243	.500	.
N	[militia]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: [militia]

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	.792[a]	.553	.416	.471	.553	4.078	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.004

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.812	2	.906	0.008	.004[a]
	Residual	10.000	45	.222		
	Total	11.812	47			

a. Predictors: (Constant), AGE, GENDER

b. Dependent Variable: [militia]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.110E-16	.272		.000	1.000
	GENDER	.375	.136	.378	2.756	.002
	AGE	-.062	.083	-.103	-.750	.457

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.110E-16	.272		.000	1.000
	GENDER	.375	.136	.378	2.756	.002
	AGE	-.062	.083	-.103	-.750	.457

a. Dependent Variable: [militia]

Coefficients[a]

Model		Correlations		
		Zero-order	Partial	Part
1	(Constant)			
	GENDER	.378	.380	.378
	AGE	-.103	-.111	-.103

a. Dependent Variable: [militia]

Descriptive Statistics

	Mean	Std. Deviation	N
[musallahin]	.35	.483	48
GENDER	1.50	.505	48
AGE	2.00	.825	48

Correlations

		[musallahin]	GENDER	AGE
Pearson Correlation	[musallahin]	1.000	.044	-.363
	GENDER	.044	1.000	.011
	AGE	.160	.000	1.000
Sig. (1-tailed)	[musallahin]	.	.384	.139
	GENDER	.384	.	.500
	AGE	.139	.500	.
N	[musallahin]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: [musallahin]

Model Summary

Model					Change Statistics		
	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.166[a]	.028	-.016	.487	.028	.637	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.534

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.302	2	.151	.637	.534[a]
	Residual	10.677	45	.237		
	Total	10.979	47			

a. Predictors: (Constant), AGE, GENDER

b. Dependent Variable: [musallahin]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.104	.281		.370	.713
	GENDER	.042	.141	.044	.296	.768
	AGE	.094	.086	.160	1.089	.282

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.104	.281		.370	.713
	GENDER	.042	.141	.044	.296	.768
	AGE	.094	.086	.160	1.089	.282

a. Dependent Variable: [musallahin]

Coefficients[a]

Model		Correlations		
		Zero-order	Partial	Part
1	(Constant)			
	GENDER	.044	.044	.044
	AGE	.160	.160	.160

a. Dependent Variable: [musallahin]

Correlations

		[isabat]	GENDER	AGE
Pearson Correlation	[isabat]	1.000	-.513	-.063
	GENDER	-.513	1.000	.000
	AGE	-.063	.000	1.000
Sig. (1-tailed)	[isabat]	.	.000	.336
	GENDER	.000	.	.500
	AGE	.336	.500	.
N	[isabat]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER [a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: [isabat]

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	.717[a]	.567	.435	.559	.467	8.200	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.001

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.115	2	1.057	8.200	.001[a]
	Residual	5.802	45	.129		
	Total	7.917	47			

a. Predictors: (Constant), AGE, GENDER
b. Dependent Variable: [isabat]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.896	.207		4.321	.000
	GENDER	-.417	.104	-.513	-4.020	.000
	AGE	-.031	.063	-.063	-.492	.625

a. Dependent Variable: [isabat]

Coefficients[a]

Model		Correlations		
		Zero-order	Partial	Part
1	(Constant)			
	GENDER	-.513	-.514	-.513
	AGE	-.063	-.073	-.063

a. Dependent Variable: [isabat]

12. Variable 12

Descriptive Statistics

	Mean	Std. Deviation	N
GENDER	1.50	.505	48
AGE	2.00	.825	48
[irhab]	.29	.459	48

		GENDER	AGE	[irhab]
GENDER	Pearson Correlation	1	.000	-.275
	Sig. (2-tailed)		1.000	.059
	N	48	48	48
AGE	Pearson Correlation	.000	1	-.513*
	Sig. (2-tailed)	1.000		.004
	N	48	48	48
[irhab]	Pearson Correlation	-.275	-.513*	1
	Sig. (2-tailed)	.059	.004	
	N	48	48	48

Control Variables			GENDER	[irhab]
AGE	GENDER	Correlation	1.000	-.275
		Significance (2-tailed)	.	.061
		df	0	45
	[irhab]	Correlation	-.275	1.000
		Significance (2-tailed)	.061	.
		df	45	0

Correlations

		[irhab]	GENDER	AGE
Pearson Correlation	[irhab]	1.000	-.275	-.056
	GENDER	-.275	1.000	.000
	AGE	-.056	.000	1.000
Sig. (1-tailed)	[irhab]	.	.029	.352
	GENDER	.029	.	.500
	AGE	.352	.500	.
N	[irhab]	48	48	48
	GENDER	48	48	48
	AGE	48	48	48

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: [irhab]

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	.281[a]	.079	.038	.451	.079	1.924	2

a. Predictors: (Constant), AGE, GENDER

Model Summary

Model	Change Statistics	
	df2	Sig. F Change
1	45	.158

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.781	2	.391	1.924	.158[a]
	Residual	9.135	45	.203		
	Total	9.917	47			

a. Predictors: (Constant), AGE, GENDER

b. Dependent Variable: [irhab]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.729	.260		2.803	.007
	GENDER	-.250	.130	-.275	-1.922	.061
	AGE	-.031	.080	-.056	-.392	.697

a. Dependent Variable: [irhab]

Coefficients[a]

Model		Correlations		
		Zero-order	Partial	Part
1	(Constant)			
	GENDER	-.275	-.275	-.275
	AGE	-.056	-.058	-.056

a. Dependent Variable: [irhab]

Appendix E

T- Tests Results

1. T-TEST RESULTS FOR VARIABLE 1

1.1. T-TEST RESULTS FOR VARIANT 1 AND VARIANT 2

1.1.1. T-TEST RESULTS FOR VARIANT 1

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
[hawasim]	1	24	.54	.509	.104
	2	24	.13	.338	.069

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
[hawasim]	Equal variances assumed	28.059	.000	3.341	46
	Equal variances not assumed			3.341	39.972

Independent Samples Test

		t-test for Equality of Means		
		Sig. (2-tailed)	Mean Difference	Std. Error Difference
[hawasim]	Equal variances assumed	.002	.417	.125
	Equal variances not assumed	.002	.417	.125

Independent Samples Test			
		t-test for Equality of Means	
		95% Confidence Interval of the Difference	
		Lower	Upper
[hawasim]	Equal variances assumed	.166	.668
	Equal variances not assumed	.165	.669

1.1.2. T-TEST RESULTS FOR VARIANT 2

Group Statistics					
	GENDER	N	Mean	Std. Deviation	Std. Error Mean
[harami]	1	24	.15	.338	.079
	2	24	.63	.498	.111

Independent Samples Test					
		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
[harami]	Equal variances assumed	30.011	.000	3.362	46
	Equal variances not assumed			3.362	39.123

Independent Samples Test				
		t-test for Equality of Means		
		Sig. (2-tailed)	Mean Difference	Std. Error Difference
[harami]	Equal variances assumed	.002	.362	.124
	Equal variances not assumed	.002	.362	.124

Independent Samples Test			
		t-test for Equality of Means	
		95% Confidence Interval of the Difference	
		Lower	Upper
[harami]	Equal variances assumed	.016	.265
	Equal variances not assumed	.010	.278

1.2. T-TEST RESULTS FOR VARIANT 1 AND VARIANT 3

1.2.1. T-TEST RESULTS FOR VARIANT 1.

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
[hawasim]	1	24	.13	.338	.069
	2	24	.00	.000	.000

Independent Samples Test					
		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
[hawasim]	Equal variances assumed	17.889	.000	1.813	46
	Equal variances not assumed			1.813	23.000

Independent Samples Test				
		t-test for Equality of Means		
		Sig. (2-tailed)	Mean Difference	Std. Error Difference
[hawasim]	Equal variances assumed	.076	.125	.069
	Equal variances not assumed	.083	.125	.069

Independent Samples Test			
		t-test for Equality of Means	
		95% Confidence Interval of the Difference	
		Lower	Upper
[hawasim]	Equal variances assumed	-.014	.264
	Equal variances not assumed	-.018	.268

1.3.T-TEST RESULTS FOR VARIANT 1 AND VARIANT 4

1.3.1. T-TEST RESULTS FOR VARIANT 1

Group Statistics					
	GENDER	N	Mean	Std. Deviation	Std. Error Mean
[hawasim]	1	24	.52	.501	.103
	2	24	.10	.339	.059

Independent Samples Test					
		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
[hawasim]	Equal variances assumed	29.571	.000	3.000	46
	Equal variances not assumed			3.000	39.892

Independent Samples Test				
		t-test for Equality of Means		
		Sig. (2-tailed)	Mean Difference	Std. Error Difference
[hawasim]	Equal variances assumed	.004	.375	.125
	Equal variances not assumed	.001	.375	.125

Independent Samples Test			
		t-test for Equality of Means	
		95% Confidence Interval of the Difference	
		Lower	Upper
[hawasim]	Equal variances assumed	.123	.627
	Equal variances not assumed	.122	.628

1.3.2. T-TEST RESULTS FOR VARIANT 4

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
[mutajawiz]	1	24	.12	.321	.014
	2	24	.52	.538	.069

Independent Samples Test					
		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
[mutajawiz]	Equal variances assumed	27.531	.000	3.000	46
	Equal variances not assumed			3.000	38.892

Independent Samples Test				
		t-test for Equality of Means		
		Sig. (2-tailed)	Mean Difference	Std. Error Difference
[mutajawiz]	Equal variances assumed	.005	.320	.125
	Equal variances not assumed	.001	.320	.125

Independent Samples Test			
		t-test for Equality of Means	
		95% Confidence Interval of the Difference	
		Lower	Upper
[mutajawiz]	Equal variances assumed	.122	.628
	Equal variances not assumed	.123	.627

2. T-TEST RESULTS FOR THE VARIABLE 2

2.1. T-TEST RESULTS FOR VARIANT 1 AND VARIANT 2

2.1.1. T-TEST RESULTS VARIANT 1

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
[allas]	1	24	.63	.495	.101
	2	24	.13	.338	.069

Independent Samples Test					
		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
[allas]	Equal variances assumed	18.872	.000	4.090	46
	Equal variances not assumed			4.090	40.628

Independent Samples Test				
		t-test for Equality of Means		
		Sig. (2-tailed)	Mean Difference	Std. Error Difference
[allas]	Equal variances assumed	.000	.500	.122
	Equal variances not assumed	.000	.500	.122

Independent Samples Test			
		t-test for Equality of Means	
		95% Confidence Interval of the Difference	
		Lower	Upper
[allas]	Equal variances assumed	.254	.746
	Equal variances not assumed	.253	.747

2.1.2. T-TEST RESULTS FOR VARIANT 2

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
[mujrim]	1	24	.12	.338	.068
	2	24	.62	.490	.100

Independent Samples Test					
		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
[mujrim]	Equal variances assumed	18.777	.000	4.082	46
	Equal variances not assumed			4.082	40.611

Independent Samples Test					
		t-test for Equality of Means			
		Sig. (2-tailed)	Mean Difference	Std. Error Difference	
[mujrim]	Equal variances assumed	.000	.500	.111	
	Equal variances not assumed	.000	.500	.111	

Independent Samples Test			
		t-test for Equality of Means	
		95% Confidence Interval of the Difference	
		Lower	Upper
[mujrim]	Equal variances assumed	.264	.646
	Equal variances not assumed	.263	.647

2.2. T-TEST RESULTS FOR VARIANT 1 AND VARIANT 3

2.2.1. T-TEST RESULTS FOR VARIANT 1

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
[allas]	1	24	.63	.495	.101
	2	24	.13	.338	.069

Independent Samples Test					
		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
[allas]	Equal variances assumed	18.872	.000	4.090	46
	Equal variances not assumed			4.090	40.628

Independent Samples Test				
		t-test for Equality of Means		
		Sig. (2-tailed)	Mean Difference	Std. Error Difference
[allas]	Equal variances assumed	.000	.500	.122
	Equal variances not assumed	.000	.500	.122

Independent Samples Test			
		t-test for Equality of Means	
		95% Confidence Interval of the Difference	
		Lower	Upper
[allas]	Equal variances assumed	.254	.746
	Equal variances not assumed	.253	.747

3. T-TEST RESULTS FOR THE VARIABLE 3

3.1 T-TEST RESULTS FOR VARIANT 1

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
[qaffas]	1	24	.54	.509	.104
	2	24	.25	.442	.090

Independent Samples Test					
		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
[qaffas]	Equal variances assumed	6.990	.011	2.119	46
	Equal variances not assumed			2.119	45.123

Independent Samples Test				
		t-test for Equality of Means		
		Sig. (2-tailed)	Mean Difference	Std. Error Difference
[qaffas]	Equal variances assumed	.040	.292	.138
	Equal variances not assumed	.040	.292	.138

Independent Samples Test			
		t-test for Equality of Means	
		95% Confidence Interval of the Difference	
		Lower	Upper
[qaffas]	Equal variances assumed	.015	.569
	Equal variances not assumed	.014	.569

4. T-TEST RESULTS FOR THE VARIABLE 5

4.1. T-TEST RESULTS FOR VARIANT 1

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
[kiki]	1	24	.83	.381	.078
	2	24	.38	.495	.101

Independent Samples Test					
		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
[kiki]	Equal variances assumed	10.983	.002	3.598	46
	Equal variances not assumed			3.598	43.175

Independent Samples Test				
		t-test for Equality of Means		
		Sig. (2-tailed)	Mean Difference	Std. Error Difference
[kiki]	Equal variances assumed	.001	.458	.127
	Equal variances not assumed	.001	.458	.127

Independent Samples Test			
		t-test for Equality of Means	
		95% Confidence Interval of the Difference	
		Lower	Upper
[kiki]	Equal variances assumed	.202	.715
	Equal variances not assumed	.201	.715

4.2 T-TEST RESULTS FOR VARIANT 3

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
[modern]	1	24	.85	.422	.080
	2	24	.54	.503	.112

Independent Samples Test					
		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
[modern]	Equal variances assumed	5.365	.026	1.219	46
	Equal variances not assumed			1.219	45.247

Independent Samples Test				
		t-test for Equality of Means		
		Sig. (2-tailed)	Mean Difference	Std. Error Difference
[modern]	Equal variances assumed	.009	.166	.137
	Equal variances not assumed	.009	.166	.137

Independent Samples Test			
		t-test for Equality of Means	
		95% Confidence Interval of the Difference	
		Lower	Upper
[modern]	Equal variances assumed	-.107	.432
	Equal variances not assumed	-.107	.432

5. T-TEST RESULTS FOR VARIABLE 7

5.1 T-TEST RESULTS FOR VARIANT 1

ANOVA					
x1					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.333	1	1.333	11.500	.001
Within Groups	5.333	46	.116		
Total	6.667	47			

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
[ahsant]	1	24	.33	.482	.098
	2	24	.00	.000	.000

T Independent Samples Test					
		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
[ahsant]	Equal variances assumed	184.000	.000	3.391	46
	Equal variances not assumed			3.391	23.000

Independent Samples Test				
		t-test for Equality of Means		
		Sig. (2-tailed)	Mean Difference	Std. Error Difference
[ahsant]	Equal variances assumed	.001	.333	.098
	Equal variances not assumed	.001	.333	.098

Independent Samples Test			
		t-test for Equality of Means	
		95% Confidence Interval of the Difference	
		Lower	Upper
[ahsant]	Equal variances assumed	.135	.531
	Equal variances not assumed	.130	.537

5.2 T-TEST RESULTS FOR VARIANT 3

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
[afya]	1	24	.50	.780	.159
	2	24	.83	1.239	.253

Independent Samples Test					
		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
[afya]	Equal variances assumed	12.629	.001	-1.115	46
	Equal variances not assumed			-1.115	38.753

Independent Samples Test				
		t-test for Equality of Means		
		Sig. (2-tailed)	Mean Difference	Std. Error Difference
[afya]	Equal variances assumed	.001	-.333	.299
	Equal variances not assumed	.001	-.333	.299

Independent Samples Test			
		t-test for Equality of Means	
		95% Confidence Interval of the Difference	
		Lower	Upper
[afya]	Equal variances assumed	-.935	.268
	Equal variances not assumed	-.938	.271

6. T-TEST RESULTS FOR VARIABLE 8

6.1 T-TEST RESULTS FOR VARIANT 1

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
[mu'mmam]	1	24	.75	.442	.090
	2	24	.29	.464	.095

Independent Samples Test					
		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
[mu'mmam]	Equal variances assumed	.406	.527	3.501	46
	Equal variances not assumed			3.501	45.892

Independent Samples Test				
		t-test for Equality of Means		
		Sig. (2-tailed)	Mean Difference	Std. Error Difference
[mu'mmam]	Equal variances assumed	.001	.458	.131
	Equal variances not assumed	.001	.458	.131

Independent Samples Test			
		t-test for Equality of Means	
		95% Confidence Interval of the Difference	
		Lower	Upper
[mu'mmam]	Equal variances assumed	.195	.722
	Equal variances not assumed	.195	.722

6.2 T-TEST RESULTS FOR VARIANT 3

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
[sheik/sayyid]	1	24	.25	.462	.085
	2	24	.79	.434	.080

Independent Samples Test					
		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
[sheik/sayyid]	Equal variances assumed	.399	.227	3.101	46
	Equal variances not assumed			3.101	45.8

Independent Samples Test				
		t-test for Equality of Means		
		Sig. (2-tailed)	Mean Difference	Std. Error Difference
[sheik/sayyid]	Equal variances assumed	.001	.447	.111
	Equal variances not assumed	.001	447	.111

Independent Samples Test			
		t-test for Equality of Means	
		95% Confidence Interval of the Difference	
		Lower	Upper
[sheik/sayyid]	Equal variances assumed	.185	.612
	Equal variances not assumed	.185	.612

7. T-TEST RESULTS FOR VARIABLE 9

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
[mawlai]	1	24	.67	.482	.098
	2	24	.17	.381	.078

Independent Samples Test					
		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
[mawlai]	Equal variances assumed	7.393	.009	3.990	46
	Equal variances not assumed			3.990	43.674

Independent Samples Test				
		t-test for Equality of Means		
		Sig. (2-tailed)	Mean Difference	Std. Error Difference
[mawlai]	Equal variances assumed	.000	.500	.125
	Equal variances not assumed	.000	.500	.125

Independent Samples Test			
		t-test for Equality of Means	
		95% Confidence Interval of the Difference	
		Lower	Upper
[mawlai]	Equal variances assumed	.248	.752
	Equal variances not assumed	.247	.753

8. T-TEST RESULTS FOR VARIABLE 10

8.1. T-TEST RESULTS FOR VARIANT 1

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
[sahwa]	1	24	.92	.282	.058
	2	24	.50	.511	.104

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
[sahwa]	Equal variances assumed	52.273	.000	3.498	46
	Equal variances not assumed			3.498	35.855

Independent Samples Test

		t-test for Equality of Means		
		Sig. (2-tailed)	Mean Difference	Std. Error Difference
[sahwa]	Equal variances assumed	.001	.417	.119
	Equal variances not assumed	.001	.417	.119

Independent Samples Test

		t-test for Equality of Means	
		95% Confidence Interval of the Difference	
		Lower	Upper
[sahwa]	Equal variances assumed	.177	.656
	Equal variances not assumed	.175	.658

8.2. T-TEST RESULTS FOR VARIANT 2

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
[musallahin]	1	24	.09	.282	.158
	2	24	.27	.011	.84

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
[musallahin]	Equal variances assumed	52.273	.010	3.498	46
	Equal variances not assumed			3.498	35.855

Independent Samples Test

		t-test for Equality of Means		
		Sig. (2-tailed)	Mean Difference	Std. Error Difference
[musallahin]	Equal variances assumed	.012	.317	.119
	Equal variances not assumed	.012	.317	.119

Independent Samples Test

		t-test for Equality of Means	
		95% Confidence Interval of the Difference	
		Lower	Upper
[musallahin]	Equal variances assumed	.177	.656
	Equal variances not assumed	.175	.558

8.3. T-Test results for variant 3

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
[irhabiyin]	1	24	.28	.504	.103
	2	24	.75	.442	.090

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
[irhabiyin]	Equal variances assumed	5.295	.026	1.218	46
	Equal variances not assumed			1.218	45.247

Independent Samples Test

		t-test for Equality of Means		
		Sig. (2-tailed)	Mean Difference	Std. Error Difference
[irhabiyin]	Equal variances assumed	.229	.167	.137
	Equal variances not assumed	.229	.167	.137

Independent Samples Test

		t-test for Equality of Means	
		95% Confidence Interval of the Difference	
		Lower	Upper
[irhabiyin]	Equal variances assumed	-.109	.442
	Equal variances not assumed	-.109	.442

9. T-TEST RESULTS FOR VARIABLE 11

9.1. T-TEST RESULTS FOR VARIANT 1

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
[militia]	1	24	.25	.442	.090
	2	24	.63	.495	.101

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
[militia]	Equal variances assumed	3.286	.006	-2.769	46
	Equal variances not assumed			-2.769	45.439

Independent Samples Test

		t-test for Equality of Means		
		Sig. (2-tailed)	Mean Difference	Std. Error Difference
[militia]	Equal variances assumed	.004	-.375	.135
	Equal variances not assumed	.008	-.375	.135

Independent Samples Test

		t-test for Equality of Means	
		95% Confidence Interval of the Difference	
		Lower	Upper
[militia]	Equal variances assumed	-.648	-.102
	Equal variances not assumed	-.648	-.102

9.2. T-TEST RESULTS FOR VARIANT 3

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
[isabat]	1	24	.45	.492	.110
	2	24	.03	.425	.98

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
[isabat]	Equal variances assumed	3.262	.004	2.663	46
	Equal variances not assumed			2.663	47

Independent Samples Test

		t-test for Equality of Means		
		Sig. (2-tailed)	Mean Difference	Std. Error Difference
[isabat]	Equal variances assumed	.004	.365	.124
	Equal variances not assumed	.004	.365	.124

Independent Samples Test

		t-test for Equality of Means	
		95% Confidence Interval of the Difference	
		Lower	Upper
[isabat]	Equal variances assumed	.678	.101
	Equal variances not assumed	.678	.101

Appendix F

Post Hoc Test Results for Age Groups

1. POST HOC TEST RESULTS FOR VARIABLE 1

1.1. POST HOC TEST RESULTS FOR VARIANT 1 AND VARIANT 2

1.1.1. POST HOC TEST RESULTS FOR VARIANT 1

Descriptives

[hawasim]

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
18-24	16	.13	.342	.085	-.06	.31
30-40	16	.56	.512	.128	.29	.84
50-60	16	.31	.479	.120	.06	.57
Total	48	.33	.476	.069	.20	.47

Descriptives

[hawasim]

	Minimum	Maximum
18-24	0	1
30-40	0	1
50-60	0	1
Total	0	1

ANOVA

[hawasim]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.542	2	.771	3.801	.020
Within Groups	9.125	45	.203		
Total	10.667	47			

Multiple Comparisons

[hawasim]
Games-Howell

(I) AGE	(J) AGE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	.438*	.154	.023	-.82	-.06
	3	-.188	.147	.421	-.55	.18
2	1	.438*	.154	.023	.06	.82
	3	.250	.175	.341	-.18	.68
3	1	.188	.147	.421	-.18	.55
	2	-.250	.175	.341	-.68	.18

*. The mean difference is significant at the 0.05 level.

1.1.2. POST HOC TEST RESULTS FOR VARIANT 2

Descriptives

[harami]

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
18-24	16	.58	.520	.128	.29	.79
30-40	16	.12	.312	.088	.12	.32
50-60	16	.30	.470	.120	.06	.47
Total	48	.33	.475	.069	.20	.47

Descriptives

[harami]

	Minimum	Maximum
18-24	0	1
30-40	0	1
50-60	0	1
Total	0	1

ANOVA

[harami]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.552	2	.761	3.801	.022
Within Groups	8.115	45	.213		
Total	10.667	47			

Multiple Comparisons

[harami]
Games-Howell

(I) AGE	(J) AGE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	.426*	.153	.020	-.82	-.06
	3	.210	.146	.411	-.45	.16
2	1	.426*	.153	.020	.06	.82
	3	.254	.175	.321	-.16	.48
3	1	.210	.146	.411	-.16	.45
	2	-.254	.175	.321	-.48	.16

*. The mean difference is significant at the 0.05 level.

1.2. POST HOC TEST RESULTS FOR VARIANT 1 AND VARIANT 3

1.2.1. POST HOC TEST RESULTS FOR VARIANT 1

ANOVA

[hawasim]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.125	2	.063	1.047	.360
Within Groups	2.687	45	.060		
Total	2.812	47			

Multiple Comparisons

[hawasim]
Games-Howell

(I) AGE	(J) AGE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	-.125	.085	.335	-.35	.10
	3	-.063	.062	.588	-.22	.10
2	1	.125	.085	.335	-.10	.35
	3	.063	.106	.826	-.20	.32
3	1	.063	.062	.588	-.10	.22
	2	-.063	.106	.826	-.32	.20

1.3.POST HOC TEST RESULTS FOR VARIANT 1 AND VARIANT 4

1.3.1. POST HOC TEST RESULTS FOR VARIANT 1

ANOVA

[hawasim]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.500	2	.750	3.830	.029
Within Groups	8.813	45	.196		
Total	10.313	47			

Multiple Comparisons

[hawasim]

Games-Howell

(I) AGE	(J) AGE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	-.375*	.163	.012	-.78	.03
	3	.000	.143	1.000	-.35	.35
2	1	.375*	.163	.012	-.03	.78
	3	.375*	.163	.012	-.03	.78
3	1	.000	.143	1.000	-.35	.35
	2	-.375*	.163	.012	-.78	.03

*. The mean difference is significant at the 0.05 level.

1.3.2. POST HOC TEST RESULTS FOR VARIANT 4

ANOVA

[mutajawiz]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.342	2	2.261	14.720	.000
Within Groups	6.838	45	.134		
Total	10.479	47			

Multiple Comparisons

[mutajawiz]

Tukey HSD

(I) AGE	(J) AGE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	.650**	.136	.054	-.02	.65
	3	.312	.136	.000	.41	1.09
2	1	-.650**	.136	.054	-.65	.02
	3	.438*	.136	.008	.10	.77
3	1	.312	.136	.000	-1.09	-.41
	2	-.438*	.136	.008	-.77	-.10

**. The mean difference is significant at the 0.01 level.

*. The mean difference is significant at the 0.05 level.

2. POST HOC TEST RESULTS FOR VARIABLE 2

2.1 POST HOC TEST RESULTS FOR VARIANT 1 AND VARIANT 2

2.1.1. POST HOC TEST RESULTS FOR VARIANT 1

ANOVA

[allas]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.875	2	.438	1.898	.020
Within Groups	10.375	45	.231		
Total	11.250	47			

Multiple Comparisons

[allas]

Games-Howell

(I) AGE	(J) AGE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	-.313*	.264	.005	-.72	.09
	3	-.250	.163	.291	-.65	.15
2	1	.313*	.264	.005	-.09	.72
	3	.063	.182	.937	-.39	.51
3	1	.250	.163	.291	-.15	.65
	2	-.063	.182	.937	-.51	.39

*. The mean difference is significant at the 0.05 level.

2.1.2. POST HOC TEST RESULTS FOR VARIANT 2

ANOVA

[mujrim]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.775	2	.433	1.696	.020
Within Groups	10.275	45	.231		
Total	11.050	47			

Multiple Comparisons

[mujrim]

Games-Howell

(I) AGE	(J) AGE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	-.316*	.260	.005	-.62	.08
	3	-.255	.160	.280	-.65	.25
2	1	.316*	.260	.005	-.08	.62
	3	.079	.180	.837	-.40	.51
3	1	.255	.160	.280	-.25	.65
	2	-.079	.180	.837	-.51	.40

*. The mean difference is significant at the 0.05 level.

2.1 POST HOC TEST RESULTS FOR VARIANT 1 AND VARIANT 3

2.2.1. POST HOC TEST RESULTS FOR VARIANT 1

Descriptives

[allas]

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
1	16	.19	.403	.101	-.03	.40
2	16	.50	.516	.129	.22	.78
3	16	.44	.512	.128	.16	.71
Total	48	.38	.489	.071	.23	.52

Descriptives

[allas]

	Minimum	Maximum
1	0	1
2	0	1
3	0	1
Total	0	1

ANOVA

[allas]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.875	2	.438	1.898	.012
Within Groups	10.375	45	.231		
Total	11.250	47			

Games-Howell

[allas] **Multiple Comparisons**

(I) AGE	(J) AGE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	-.313*	.164	.015	-.72	.09
	3	-.250	.163	.291	-.65	.15
2	1	.313*	.164	.015	-.09	.72
	3	.333*	.182	.020	-.39	.51
3	1	.250	.163	.291	-.15	.65
	2	-.333*	.182	.020	-.51	.39

*. The mean difference is significant at the 0.05 level.

2.2.2. POST HOC TEST RESULTS FOR VARIANT 3

Descriptives

[irhabi]

	Minimum	Maximum
1	0	1
2	0	1
3	0	1
Total	0	1

ANOVA

[irhabi]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.975	2	.418	1.898	.015
Within Groups	10.275	45	.221		
Total	11.250	47			

Games-Howell

[irhabi]

Multiple Comparisons

(I) AGE	(J) AGE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
1	2	.323*	.266	.015	-.62	.09
	3	.290	.163	.291	-.55	.25
2	1	.323*	.266	.015	-.09	.62
	3	.323*	.282	.018	-.39	.50
3	1	.290	.163	.291	-.25	.55
	2	.323*	.282	.018	-.50	.39

3. POST HOC TEST RESULTS FOR VARIABLE 3

3.1 POST HOC TEST RESULTS FOR VARIANT 1

ANOVA

[qaffas]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.542	2	2.271	14.730	.000
Within Groups	6.938	45	.154		
Total	11.479	47			

Multiple Comparisons

[qaffas]

Tukey HSD

(I) AGE	(J) AGE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	.313	.139	.074	-.02	.65
	3	.750**	.139	.000	.41	1.09
2	1	-.313	.139	.074	-.65	.02
	3	.438*	.139	.008	.10	.77
3	1	-.750**	.139	.000	-1.09	-.41
	2	-.438*	.139	.008	-.77	-.10

**. The mean difference is significant at the 0.01 level.

*. The mean difference is significant at the 0.05 level.

3.2 POST HOC TEST RESULTS FOR VARIANT 3

ANOVA

[ghashash]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.542	2	2.271	14.730	.000
Within Groups	6.938	45	.154		
Total	11.479	47			

Multiple Comparisons

[ghashash]

Tukey HSD

(I) AGE	(J) AGE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	.313	.139	.074	-.02	.65
	3	.750**	.139	.000	.41	1.09
2	1	-.313	.139	.074	-.65	.02
	3	.438*	.139	.008	.10	.77
3	1	-.750**	.139	.000	-1.09	-.41
	2	-.438*	.139	.008	-.77	-.10

**. The mean difference is significant at the 0.01 level.

*. The mean difference is significant at the 0.05 level.

4. POST HOC TEST RESULTS FOR VARIABLE 4

4.1 POST HOC TEST RESULTS FOR VARIANT 1

Descriptives

[tahshish]

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
1	16	1.00	.000	.000	1.00	1.00
2	16	.75	.447	.112	.51	.99
3	16	.25	.447	.112	.01	.49
Total	48	.67	.476	.069	.53	.80

ANOVA

[tahshish]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.667	2	2.333	17.500	.000
Within Groups	6.000	45	.133		
Total	10.667	47			

Multiple Comparisons

[tahshish]

Games-Howell

(I) AGE	(J) AGE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	.250	.112	.097	-.04	.54
	3	.750**	.112	.000	.46	1.04
2	1	-.250	.112	.097	-.54	.04
	3	.500*	.158	.010	.11	.89
3	1	.750**	.112	.000	1.04	.46
	2	.500*	.158	.010	.89	.11

**. The mean difference is significant at the 0.01 level.

*. The mean difference is significant at the 0.05 level.

4.2 POST HOC TEST RESULTS FOR VARIANT 2

ANOVA

[tasnif]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.542	2	2.281	13.630	.000
Within Groups	5.938	45	.154		
Total	9.479	47			

[tasnif]

Tukey HSD **Multiple Comparisons**

(I) AGE	(J) AGE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	.313	.123	.174	-.02	.75
	3	.890**	.123	.000	.41	1.08
2	1	-.313	.123	.174	-.65	.02
	3	.538*	.123	.005	.10	.87
3	1	-.890**	.123	.000	-1.09	-.41
	2	-.538*	.123	.005	-.77	-.10

**. The mean difference is significant at the 0.01 level.
*. The mean difference is significant at the 0.05 level.

5. POST HOC TEST RESULTS FOR VARIABLE 5

5.1. POST HOC TEST RESULTS FOR VARIANT 1

ANOVA

[kiki]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.542	2	.771	3.491	.000
Within Groups	9.938	45	.221		
Total	11.479	47			

Multiple Comparisons

[kiki]

Games-Howell

(I) Age	(J) Age	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	.188	.161	.482	-.21	.58
	3	.438**	.161	.000	.04	.83
2	1	-.188	.161	.482	-.58	.21
	3	.250	.177	.347	-.19	.69
3	1	.438**	.161	.000	.83	.04
	2	-.250	.177	.347	-.69	.19

**. The mean difference is significant at the 0.01 level.

5.2 POST HOC TEST RESULTS FOR VARIANT 3

ANOVA

[modern]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.541	2	2.291	13.630	.000
Within Groups	4.939	45	.164		
Total	9.479	47			

[modern]

Tukey HSD **Multiple Comparisons**

(I) AGE	(J) AGE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	.413*	.123	.004	-.02	.65
	3	.580*	.123	.002	.43	1.07
2	1	-.413*	.123	004	-.65	.02
	3	.538*	.123	.005	.10	.77
3	1	-.580*	.123	002	-1.05	-.41
	2	-.538*	.123	.005	-.77	-.10

*. The mean difference is significant at the 0.05 level.

6. POST HOC TEST RESULTS FOR VARIABLE 6

6.1 POST HOC TEST RESULTS FOR VARIANT 1

Descriptives

[hata]

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
1	16	.44	.512	.128	.16	.71
2	16	.00	.000	.000	.00	.00
3	16	1.56	1.315	.329	.86	2.26
Total	48	.67	1.038	.150	.37	.97

ANOVA

[hata]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	19.792	2	9.386	14.659	.000
Within Groups	28.875	46	.754		
Total	49.667	48			

Multiple Comparisons

[hata]

Games-Howell

(I) AGE	(J) AGE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	.438**	.128	.002	.10	.77
	3	.448**	.153	.002	.02	.23
2	1	.438**	.128	.002	.77	.10
	3	1.563	.329	.039	.42	.71
3	1	.448**	.153	.002	.23	2.02
	2	1.563	.329	.039	.71	2.42

**. The mean difference is significant at the 0.01 level.

6.2 POST HOC TEST RESULTS FOR VARIANT 2

Descriptives

[jamila]

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
1	16	.45	.502	.128	.16	.71
2	16	.01	.011	.000	.00	.00
3	16	.76	1.304	.329	.66	2.26
Total	48	1.22	1.028	.150	.34	.97

ANOVA

[jamila]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	20.792	2	8.481	13.609	.000
Within Groups	29.875	45	.653		
Total	51.667	47			

Multiple Comparisons

[jamila]

Games-Howell

(I) AGE	(J) AGE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	.411**	.171	.002	.10	.67
	3	.412**	.142	.002	.02	.13
2	1	.411**	.171	.002	.61	.11
	3	1.563	.411	.048	.42	.61
3	1	.412**	.142	.002	.23	1.02
	2	1.563	.411	.048	. .61	1.42

**. The mean difference is significant at the 0.01 level.

7. POST HOC TEST RESULTS FOR VARIABLE 7

7.1 POST HOC TEST RESULTS FOR VARIANT 1

ANOVA

[ahsant]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.667	2	.333	24.500	.008
Within Groups	6.000	45	.133		
Total	6.667	47			

Multiple Comparisons

[ahsant]

Games-Howell

(I) AGE	(J) AGE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	.313	.123	.054	-.02	.55
	3	.580*	.123	.008	.43	1.17
2	1	-.313	.123	054	-.55	.02
	3	.338	.123	.045	.10	.67
3	1	-.580*	.123	008	-1.04	-.41
	2	-.338	.123	.045	-.67	-.10

*. The mean difference is significant at the 0.05 level.

8. POST HOC TEST RESULTS FOR VARIABLE 8

8.1 POST HOC TEST RESULTS FOR VARIANT 1

ANOVA

[mu'mmam]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.042	2	1.021	4.623	.015
Within Groups	9.938	45	.221		
Total	11.979	47			

Multiple Comparisons

[mu'mmam]

Games-Howell

(I) AGE	(J) AGE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	-.500*	.158	.010	-.89	-.11
	3	-.513*	.170	.008	-.73	.11
2	1	.500*	.158	.010	.11	.89
	3	.188	.170	.520	-.23	.61
3	1	.513*	.170	.008	-.11	.73
	2	-.188	.170	.520	-.61	.23

*. The mean difference is significant at the 0.05 level.

8.2 POST HOC TEST RESULTS FOR VARIANT 3

ANOVA

[sheik/seyyid]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.292	2	.146	.577	.007
Within Groups	10.375	45	.253		
Total	11.667	47			

Multiple Comparisons

[sheik/seyyid]

Games-Howell

(I) AGE	(J) AGE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	-.388*	.176	.010	-.62	.25
	3	-.425*	.175	.008	-.56	.31
2	1	.388*	.176	.010	-.25	.62
	3	.063	.182	.937	-.39	.51
3	1	.425*	.175	.008	-.31	.56
	2	-.063	.182	.937	-.51	.39

9. POST HOC TEST RESULTS FOR VARIABLE 10

9.1. POST HOC TEST RESULTS FOR VARIANT 1

ANOVA

[sahwa]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.167	2	.583	3.000	.009
Within Groups	8.750	45	.194		
Total	9.917	47			

Multiple Comparisons

[sahwa]

Games-Howell

(I) AGE	(J) AGE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	-.250	.261	.323	-.47	.27
	3	.375*	.154	.007	.86	.01
2	1	.250	.261	.323	.27	.47
	3	-.125	.141	.652	.47	.22
3	1	.375*	.154	.007	-.01	.86
	2	.125	.141	.652	-.22	.47

*. The mean difference is significant at the 0.05 level

9.2. POST HOC TEST RESULTS FOR VARIANT 2

Descriptives

[musallahin]

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
1	16	.45	.502	.128	.16	.71
2	16	.01	.011	.000	.00	.00
3	16	.76	1.304	.329	.66	2.26
Total	48	1.22	1.028	.150	.34	.97

ANOVA

[musallahin]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	20.792	2	8.481	13.609	.000
Within Groups	29.875	45	.653		
Total	51.667	47			

Multiple Comparisons

[musallahin]

Games-Howell

(I) AGE	(J) AGE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	.112	.171	.122	.11	.67
	3	.362*	.042	.009	.02	.23
2	1	.112	.171	.122	.67	.11
	3	1.563	.411	.048	1.42	.61
3	1	.362*	.042	.009	.23	.02
	2	1.563	.411	.048	. .61	1.42

*. The mean difference is significant at the 0.05 level.

10. POST HOC TEST RESULTS FOR VARIABLE 11

10.1. POST HOC TEST RESULTS FOR VARIANT 1

ANOVA

[militia]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.500	2	.250	.994	.018
Within Groups	11.313	45	.251		
Total	11.813	47			

Multiple Comparisons

[militia]

Tukey HSD

(I) AGE	(J) AGE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	.344*	.177	.022	.18	.68
	3	.762*	.177	.016	.30	.55
2	1	.344*	.177	.022	.68	.18
	3	.762	.177	.762	-.55	.30
3	1	.762*	.177	.016	-.55	.30
	2	.762	.177	.762	-.30	.55

*. The mean difference is significant at the 0.05 level.

[militia]

Tukey HSD[a]

AGE	N	Subset for alpha = 0.05
		1
2	16	.31
3	16	.44
1	16	.56
Sig.		.344

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 16.000.

10.2. POST HOC TEST RESULTS FOR VARIANT 2

ANOVA

[musallahin]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.292	2	.646	4.043	.004
Within Groups	7.188	45	.160		
Total	8.479	47			

Multiple Comparisons

[musallahin]

Games-Howell

(I) AGE	(J) AGE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	.313*	.120	.009	.00	.62
	3	.375*	.125	.023	.05	.70
2	1	-.313*	.120	.009	-.62	.00
	3	.063	.173	.931	-.36	.49
3	1	-.375*	.125	.013	-.70	-.05
	2	-.063	.173	.931	-.49	.36

*. The mean difference is significant at the 0.05 level.

Appendix G

List of Iraqi Arabic Consonant and Vowel Phonemic Symbols

Symbol	Iraqi Example	Spelling in Arabic writing symbols	English Counterpart
/b/	/ba:b/	باب	door
/t/	/ti:n/	تين	fig
/ɵ/	/tla:ɵə/	تلاثه	three
/ʤ/	/ ʤisir/	جسر	bridge
/ḥ/	/ ḥilim/	حلم	dream
/x/	/ xəmsə/	خمسه	five
/d/	/wardə/	ورده	flower
/ ð /	/ ðəhəb/	ذهب	gold
/r/	/risa:lə/	رساله	letter
/z/	/zəmən/	زمن	time
/s/	/siḥir/	سحر	magic
/ ʃ/	/ʃa:f/	شاف	he saw
/tʃ/	/ tʃinit/	چنت	I was
/ṣ/	/ṣəbur/	صبر	patience
/ṭ/	/ṭi:n/	طين	mud

/ ḍ/	/ḍəlma/	ظلام	darkness
/ ʕ/	/ʕəsəl/	عسل	honey
/ ɣ/	/ɣəza:l/	غزال	deer
/f/	/fa:r/	فار	mice
/q/	/qəmar/	قمر	moon
/k/	/kita:b/	كتاب	book
/g/	/ga:l/	گال	he said
/l/	/Leila/	ليلى	a feminine proper noun
/m/	/miliḥ/	ملح	salt
/n/	/nu:r/	نور	light
/h/	/ʔlhind/	الهند	India
/w/	/wa:ḥid/	واحد	one
/y/	/yəmi:n/	يمين	right
/ʔ/	/ʔri:d/	اريد	I want
/a/	/huda/	هدى	a feminine proper noun
/a:/	/səla:m/	سلام	peace/ a masculine proper noun
/u/	/kura/	كره	ball
/u:/	/su:g/	سوگ	market
/i/	/filim/	فلم	film

/i:/	/ʔmi:r/	امير	Prince/ a masculine proper noun
/ə/	/wələd/	ولد	boy