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DIALECT TRANSFER FOR L2 ARABIC LEARNERS

by

Jozeca Lathrop
Bachelor of Science, University of Phoenix, 2011

A Thesis
Submitted to the Graduate Faculty

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This thesis, submitted by Jozeca Lathrop in partial fulfillment of the requirements for the Degree of Master of Arts from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

_____
Dr. Kristine Trammell, PhD, Chairperson

_____
Dr. Bethany Shockley, PhD

_____
Dr. Anne Walker, PhD

This thesis is being submitted by the appointed advisory committee as having met all of the requirements of the School of Graduate Studies at the University of North Dakota and is hereby approved.

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Dr. Chris Nelson, Associate Dean
School of Graduate Studies

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PERMISSION

Title   Dialect Transfer for L2 Arabic Learners

Department   Linguistics

Degree   Master of Arts

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Jozeca Lathrop
July 11, 2019

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ABBREVIATIONS

CA	Colloquial Arabic
COP	Community of Practice
EA	Egyptian Arabic
GA	Gulf Arabic
L1	First language
L2	Second (additional) language
LA	Levantine Arabic
MSA	Modern Standard Arabic
NAA	North African Arabic
SCT	Sociocultural Theory
SLA	Second Language Acquisition

ABSTRACT

With rising numbers of Arabic language learners studying abroad, language programs face two challenges that are unlike many other commonly-studied languages. First, dialects of spoken Arabic vary significantly across the span of North Africa and the Middle East, so in choosing a location to study abroad, learners are also choosing a particular dialect of Arabic on which to focus their attention. Second, Arabic is diglossic, so written and spoken varieties are significantly different from each other. Modern Standard Arabic (MSA) is used for most written material, media, and some formal settings, while Colloquial Arabic (CA) is used for informal spoken interactions and most social media (even when written). Universities in the West have primarily taught MSA, with a recent emphasis on the integration of CA. In contrast, many programs in the Arab World focus on a local dialect of CA, integrating MSA into their curriculum. Because of dialect variety, some learners choose to focus their studies on MSA under the assumption that MSA will allow them to function in any region of the Arab World. This study aims to evaluate the relationship between a learner's focus on MSA and his or her ability to understand an unfamiliar dialect of CA, as well as to determine which dialect best facilitates transfer to other dialects.

An online listening assessment tested 106 language learners' comprehension of four regional dialects of Arabic: North African, Egyptian, Levantine, and Gulf. Participants listened to a short clip in Arabic twice, then, on the following page, wrote everything that they understood and remembered (in English). A post-assessment questionnaire included information about the learner's focus on MSA in each semester of full-time study. For the first analysis, the

relationship between the focus on MSA and unfamiliar dialect listening ability was measured by an independent t-test (comparison of means) for learners with a high focus on MSA versus learners with a low focus on MSA for each semester of study. This analysis was conducted for participants who had studied full-time for at least four semesters. Secondly, multiple regression analysis looked at the question of dialect transferability by predicting the scores of all 106 participants in one dialect while controlling for independent variables such as time studied, scores in the primary dialect studied, and exposure to the target dialect.

The first analysis focused on learners of eastern dialects of Arabic (Egyptian, Levantine, and Gulf) and their ability to understand both eastern and western (North African) dialects of Arabic that were unfamiliar to them. Results of this study show that learners of eastern dialects who had a lower focus on MSA (less than 20% in their first two semesters and less than 40% in their second two semesters) had statistically significant higher scores in North African Arabic than those who had a high focus on MSA. When measuring scores of unfamiliar eastern dialects, the difference in means between those with low focus on MSA and those with high focus on MSA was not statistically significant. However, participants who focused less on MSA throughout the course of study did have higher scores in the primary dialect they studied as well as a higher average of all four test scores. The second analysis showed that scores in Levantine Arabic were a good predictor for scores in other eastern dialects. Scores in Gulf Arabic predicted only Levantine Arabic scores, while Egyptian Arabic scores were not a significant predictor of other dialects. In addition, score in the primary dialect studied was the best predictor for scores in all dialects.

CHAPTER 1

INTRODUCTION

The past twenty years have brought Arabs (and along with them, their language and culture) into the frame of Western consideration (Trentman, 2018). Distant Arabia is no longer just the land of wars, deserts, and nomadic shepherds. Twenty-first century events, both in the U.S. and abroad, have stirred interest and fascination with this land—so much so that there was a 300% increase of students of Arabic studying abroad between 2000 and 2010 (Institute of International Education, 2015). Though these numbers have decreased since the Arab Spring in 2011, Arabic is still considered a highly valuable language in the global economy. The Ethnologue estimates that there are approximately 315 million native speakers of Arabic worldwide (Eberhard, Simons, & Fennig, 2019). Studies have been conducted of Arabic programs and learners within the U.S., but significantly less research has examined strategies and practices of Arabic learners in study abroad contexts (Trentman, 2018). While studying abroad may be a significant advantage for language learners, those living and studying in the Arab World also face challenges that may be distinct from other study abroad situations.

1.1   Arabic Issues

Living and studying in a country that is not your own may seem to be the best way to immerse oneself in a new culture and learn a language as quickly as possible. However, as Trentman (2018) points out, learners who are studying abroad face unique challenges of breaking

into social networks, struggling with identity, and suffering from loneliness. Learners of Arabic also face the challenges of diglossia and dialect variety. Arabic teachers and students must be equipped with tools and resources that will help them overcome challenges and make the most of their study abroad experience.

1.1.1 Arabic diglossia

Learners of Arabic—especially those who have studied in the Arab World—have long faced the complex issue of *diglossia* in Arabic. Ferguson (1959a) provides a seminal and much-referenced definition of diglossia:

> 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 standards), 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 sector of the community for ordinary conversation. (1959a, p. 336)

Ferguson discusses Arabic in addition to three other languages (Swiss German, Haitian Creole, and Modern Greek) that employ both High (H) and Low (L) varieties of the language for various functions within the speech community. In Arabic, the H variety is referred to as *fusHa,* a term which covers both Classical Arabic and Modern Standard Arabic (MSA). The L Arabic includes regional colloquial dialects and is most commonly referred to as *ammiyya* (1959a).

Differences in attitudes and use between H and L are significant. Arabs regard H Arabic to be more complex and more beautiful than L varieties. Because Classical Arabic is the language of the Qur'an, Muslim Arabs esteem it as descended from Allah and therefore existing before

creation (1959a). It is also the language of education. Students begin learning H in kindergarten and study its grammar, rules, vocabulary, and literature throughout their schooling. Most written documents, formal speeches, and news broadcasts are in H, while conversations between friends or family occur in L. Most participation in social media, though written, is conducted in L (Shiri & Joukhadar, 2018).

A subsequent article by Ferguson (1959b) dealt strictly with Arabic diglossia and the origins of Classical Arabic and various spoken varieties. While the general assumption has been that L varieties of Arabic descended from H Arabic, Ferguson argues that these dialects are more likely to have descended from an Arabic koine (a common shared variety), because spoken varieties of Arabic have many features in common that are distinctive from Classical Arabic. These features include phonological, morphological, and syntactic differences, as well as a large amount of vocabulary shared between dialects but not with Classical (1959b).

Almost every source discussing Arabic diglossia references Ferguson's definition and hypothesis about Arabic origins. Many disagree with the binary nature of diglossia as it has often been applied to Arabic and have proposed other methods for classifying Arabic as a continuum (Al-Batal, 1992). For example, Badawi (1985) defines five different levels of language use, ranging from the highest, Classical Arabic, to the lowest, "Illiterate spoken Arabic" (1985, p. 17). Even Ferguson acknowledges that H and L Arabic are not completely distinct:

> A kind of spoken Arabic much used in certain semiformal or cross-dialectal situations has a highly classical vocabulary with few or no inflectional endings, with certain features of classical syntax, but with a fundamentally colloquial base in morphology and syntax, and a generous admixture of colloquial variety. (Ferguson, 1959b, p. 332)

In addition to Badawi's levels of use, a model proposed by Alosh presents eight different combinations of situation (formal or informal), event (public, private, or intimate), and setting (local or non-local). Speech output in this model "ranges from pure MSA to pure [colloquial], occurring at some point on the continuum" (1997, p. 81).

Finally, Ferguson's (1991) updated article "Diglossia Revisited" addresses several weaknesses of his original article and clarifies that it is not that languages that *have* diglossia, but rather that speech communities *use* language in a diglossic manner. In addition, he acknowledges that his early work did not thoroughly address the issue of register variation. He maintains his belief that Arabic and other diglossic languages are centered around two poles of H and L varieties, and that between those two poles, speakers' practices vary in register.

1.1.2 *Arabic dialects & development of MSA*

In Watson's (2002) thorough introduction to the history of the Arabic language, she agrees with Ferguson's proposal that dialects of Arabic, as they are known today, originate from an Arabic koine, derived from old dialects of Central and Northern Arabia. With the Islamic conquest, Arabic spread northward into the Levant (Eastern Mediterranean) and westward into North Africa, with each geographical variety influenced by local languages (such as Syriac in the Fertile Crescent and Berber in Morocco). While each of these dialects was experiencing major changes, Classical Arabic was codified by the writing of the Qur'an, based primarily on the Hijazi dialect of Central Arabia. What has continued as Classical Arabic—and is used as the basis for Modern Standard Arabic—is a historical snapshot of language as it was used by the Hijazi tribe of Quraysh during the time of Muhammed, influenced by poetic language spoken across tribes (2002).

Versteegh (2001) gives a helpful explanation of the development of Arabic from Classical to MSA. While the Arab World was under Ottoman rule, Turkish dominated as the language of power, while Classical Arabic remained the language of religion. However, after the Arab Revolt against the Ottoman Empire in the early 1900s, religious leaders, politicians, and scholars recognized the need to maintain a standardized version of the language. Arab linguists began to publish dictionaries and grammars that were based on Classical Arabic but introduced modern terms and left out some structures of Classical Arabic that were archaic to the modern speaker.

Academies of Damascus, Cairo, Iraq, and Jordan—while not always agreeing—have worked toward a standardization of the language that fulfills two roles: First, standardization protects the language from the influences of other languages or colloquial varieties of Arabic. Second, it allows for the introduction of modern terminology and structures that facilitate global communication (2001). While Arabs recognize that there is a difference between the language of media and most written material (MSA) and the language of the Qur'an (Classical Arabic), the two varieties are not distinguished in Arabic—the term *fusHa* is used for both. Versteegh explains that "ideologically, of course, the modern language is still the same as the language of the Qur'an and the Classical period, but in practice it is easy to see that there are differences" (2001, p. 183).

Nydell (1994) classified modern dialects into five main geographical groups: North African (Algeria, Libya, Morocco, and Tunisia), Egyptian, Levantine (Jordan, Lebanon, Palestine, and Syria), Iraqi, and Gulf (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates, and Yemen). Within each of these regions there is also significant variation, such as the phonological differences between Bedouin and urban dialects (Watson, 2002). While Nydell uses five geographical regions, Watson divides spoken Arabic into two broad groupings—dialects in and

west of Libya, and dialects in and east of Egypt. This categorization is significant in terms of mutual intelligibility. She writes, "Dialects of Arabic form a roughly continuous spectrum of variation, with the dialects spoken in the eastern and western extremes of the Arab-speaking world being mutually unintelligible" (2002, p. 8).

Holes (2004) describes Arabic speakers' process of "leveling" (p. 49) when speaking inter-dialectically, replacing local features with more standardized features when talking with someone from a different region. This standardizing is not necessarily what they learned in school (MSA) but is rather based on a multi-dialect understanding of which words are strictly colloquial. Ryding (1991) discusses a type of Pan-Arabic language, referred to as Educated Spoken Arabic or Formal Spoken Arabic, which draws on both MSA as well as the colloquial varieties of the interlocutors. Little research exists regarding native speakers' strategies for communicating across dialects of Arabic, and even less on non-native speakers' inter-dialect issues.

1.2   Purpose and Significance of the Study

Given the complex issues of diglossia and dialect variety, language learners face many challenges if they desire to become proficient in Arabic. In my role as a language learning consultant in the Arab World, I have observed learners wrestle with a common question: "What should I do if I am not planning to stay in the place where I first study Arabic?" This question approaches both the issues of dialect variety and diglossia. Learners recognize that studying one dialect may not give them the tools they need to engage with the community in a second dialect. Those who travel within the Arab World early in their study find that, while Arabs in other countries can understand learners' basic attempts at communicating, the learners themselves have a difficult time understanding the response in an unfamiliar dialect.

The learners' question, "What should I do?" in the context of dialect change is often related to the issue of diglossia. Learners wonder if they are focusing too much on CA and if they should be putting more effort into studying MSA. Because MSA is used as the language of the media and is considered a "standard," students and teachers often assume that it is the natural choice for those who may end up living in other countries.

The purpose of this study is to address these questions by looking at ways that learners can face the ever-growing need for dialect multiplicity. I will examine these challenges and strategies through the lens of sociocultural approaches to language learning, arguing that the best way for learners to embrace dialect multiplicity is through participation in host communities.

This study will address the challenges of Arabic learners by seeking answers to the following research questions:

1. What is the relationship between a learner's focus on MSA and his or her ability to understand an unfamiliar dialect of Arabic?

2. Which dialect of Colloquial Arabic (CA) best prepares learners to understand unfamiliar dialects?

While this study primarily focuses on learners of Arabic, future applications may include how learners of other languages with broad dialectic variety can effectively approach the study of a first dialect in order to best facilitate transfer to other dialects. On a theoretical level, this paper seeks to show that those who focus on the language of the community (CA in the case of Arabic) will have more tools for growth than those who focus on a variety that is used in limited contexts (MSA). Those who grow in the context of relationship will be more prepared to understand unfamiliar language varieties than those who view their language learning as a private practice that takes place in their own mind.

CHAPTER 2

THEORETICAL BACKGROUND & REVIEW OF LITERATURE

A researcher's theoretical orientation influences his or her questions and hypothesis, approach to the research, and interpretation of results (Johnson, 1991). Therefore, it is necessary for the researcher to acknowledge his or her position on significant issues related to major approaches in the field of Second Language Acquisition (SLA), while recognizing that the existence of a variety of divergent approaches does not detract from—but rather enriches—the understanding of the language learning process. Lantolf (1996) likens this variety to a field of blooming flowers that serve the purpose of cross-pollination. Each distinct approach spurs greater development within the field and addresses questions that will ultimately improve language learning.

As a researcher, my theoretical background is influenced by my own experience and the experiences of others whose language learning I have observed. Upon moving to Jordan in 2014, I spent two years in full-time Arabic study using an approach that emphasizes social interaction and a focus on comprehension. Since then, I have continued in my own Arabic learning while also acting as a language learning consultant for language programs and Arabic learners in eight countries across the Arab World, from Morocco to Oman. I have observed a variety of approaches and trained native speaker Arabic instructors in communicative techniques for both classroom settings and private tutoring. My aim has been to equip individual learners with tools for depth of language growth within the community, regardless of the theoretical approach of the program in which they are studying. My observations from the past five years of language learning and consultation with learners and language programs provide a rich context for my own theoretical background.

Two distinct theoretical approaches to second language acquisition—cognitive and sociocultural—view language acquisition research and practice differently (Fazel, 2014). Each of these approaches have made significant attempts to explain the process of both first and second language acquisition. For years, the cognitive camp has dominated the field of mainstream SLA research, although the roots of cognitivism do not lie in the field of SLA but rather in psychology and learning-focused cognitive science (Atkinson, 2011). In its application to SLA, cognitivism suggests that language learning is a mental activity that happens in the mind of the learner. Though it can be practiced socially, language itself resides in the mind of the speaker, and therefore, knowledge of the language and its acquisition focuses on what happens for each individual (Zuengler & Miller, 2006). The *Mind as Computer* model (Atkinson, 2011) sheds light on a significant cognitive metaphor—that the learner needs input (information) that they can then process and produce an output in the same way that a computer does. The use of the term "acquisition" in SLA is reflective of the strong cognitivist perspectives that dominate the field.

However, for the past twenty years, the field of SLA research has also been shaped by an alternative perspective (Ortega, 2011). The sociocultural orientation toward SLA claims that language use is a social practice, and therefore language acquisition should be approached as a social practice. This orientation advocates for methods that best facilitate the learner's participation in the community. Cognitive and sociocultural theories each have implications for the ontology of SLA (how language learning works), the epistemology of SLA (how we approach knowledge and its acquisition), and the methodology of SLA (how we approach language instruction) (Zuengler & Miller, 2006).

Ortega (2011) outlines several important distinctions between cognitive and sociocultural approaches to SLA. The cognitive approach draws primarily from psychological explanations (what is happening in the mind of the learner) while the sociocultural approach draws primarily from socially oriented explanations (what is happening between people). The former sees language success as an individual accomplishment while the latter views it as a social accomplishment. Cognitivism posits that knowledge can stand on its own, while socioculturalism would argue that learning is always situated within a context.

Proponents for these alternative approaches (*see* Atkinson, 2011) do not deny that there is a distinct cognitive process that occurs in the mind of the learner as they learn a second language. Atkinson, for example, discusses an approach he calls *sociocognitive*—recognizing the central roles of both cognition and social interaction. This balanced approach draws from much of the previous sociocultural history and approaches. Indeed, my experience working with language learners in a variety of contexts has suggested that those who see their language learning as something occurring only within their own head miss opportunities to engage in rich growth in relationships with native speakers of the language they are studying. Therefore, I have chosen to approach this study and the interpretation of its results from a primarily sociocultural perspective with the goal of helping learners fully engage in new language communities.

In discussing the theoretical background, the following section will briefly define and explain two closely-related socially informed theories: Neo-Vygotskyian Sociocultural Theory and Community of Practice Theory. I will then review the available literature on the implications of diglossia and dialects for Arabic learners and examine these implications within the proposed theoretical framework. The final section will describe the gaps in the current literature and how this study seeks to answer some of the questions that remain.

2.1   Theoretical Framework of SLA

2.1.1   *Neo-Vygotskian sociocultural theory*

Though Lev Vygotsky's career was shortened by an early death at the age of 37, his foundational work set the stage for many social theorists that came after him (Swain, Kinnear, & Steinman, 2015). Sociocultural Theory (SCT) is based on the idea that learning and development are a product of social interaction and participation in cultural practices. Vygotsky's ideas were not originally developed to explain SLA (Lantolf, 2011) but rather taught and practiced in the field of education. Two of the most common metaphors attributed to Vygotsky's work are *mediation* and the *Zone of Proximal Development* (ZPD). Mediation refers to a community's use of cultural artifacts (including language as a symbolic artifact) to mediate their experience of the world. Meaning, then, is not fixed but is understood as a product of shared understanding between members of the community (Zuengler & Miller, 2006). Within the field of SLA, SCT focuses on how learners develop the skills they need to use a new language to mediate their activities and experiences (Lantolf, 2011).

In addition to mediation, Vygotsky's metaphor of the ZPD is a useful tool for understanding SLA processes. Sometimes described as a place and sometimes as an activity, the ZPD represents the relationship and interaction between an expert (or mediator) and a novice. Ideal development happens when the novice is doing an activity that is challenging enough to require help from the expert, but not too challenging so as to discourage the novice. Swain, et. al. (2015) discuss Krashen's *i + 1* model, which represents instructional input that is just above the learner's current ability. Though Vygotsky's ZPD metaphor appears to represent a similar concept, Krashen's model looks solely at the difficulty of the input in relation to the learner's ability, while the ZPD emphasizes the relationship between learner and expert as well as the

context of the learning. The *i + 1* metaphor relates to the cognitive acquisition model, while the ZPD supports a social model of participation.

2.1.2   *Community of Practice theory*

Another significant contribution to sociocultural approaches to SLA is Lave & Wenger's development of Community of Practice (COP) theory. Like SCT, COP theory was not originally created to explain SLA, but rather as a theory of learning (which has significant implications for learning a second language). Lave & Wenger (1991) argue that learning is not something that only takes place in the mind of the learner. Instead, COP theory places learning within the context of the learner's experience in the world (Wenger, 1998). Learning is a social practice of creating shared meaning and deepening the learner's ability to participate in a shared community. Community of Practice theory emphasizes learning through negotiation of meaning, rather than through acquisition of information and skills (Farnsworth, Kleanthous, & Wenger-Trayner, 2016).

In the broadest sense of the term, the definition of a COP would include an entire group that speaks a particular language. However, the term is usually used more narrowly to refer to smaller groups within a language community that relate to each other and recognize who is in the group and who is on the outside. In its application to SLA in this paper, use of the term COP will include communities of people who speak the same language. For the sake of clarity, the terms *community* and COP will be used interchangeably.

Wenger (1998) argues that learning is social participation and that the best learning takes place when learners are engaged as contributing members of a COP. Lave & Wenger's term *legitimate peripheral participant* (1991) illustrates how those who were once on the outside of a community can gradually make their way toward active acceptance by learning to participate in

the community in meaningful ways. The idea of growing into a COP correlates well with Vygotsky's SCT, though Vygotsky looked more closely at cognitive processes as they were influenced by social processes, not the social processes (participation in COPs) themselves (Swain et al., 2015).

Other socially informed approaches to SLA include *language socialization, complexity theory, conversation-analytical approach, identity approach,* and the previously-mentioned *sociocognitive approach* (Atkinson, 2011). As a whole, sociocultural approaches carry significant implications for SLA. Reflective of a child's growth and development into their first language and culture (a COP), a learner's growth in a second language can be seen as participation in a COP as legitimate peripheral participants. This participation happens through the interaction between the expert (a speaker of the language) and the novice (the learner) in the ZPD. The learner begins to mediate his or her experience of the new COP by way of new symbolic artifacts (including words in the new language) and become a fully-participating member of the community.

2.2   Implications of Diglossia

Arabic diglossia has significant implications for language learners. Language programs, both in the U.S. and abroad, face the challenge of choosing which variety of Arabic to teach students. This choice carries both sociolinguistic and pedagogical implications for the learners.

2.2.1   Sociolinguistic implications

Many Arabic programs in the U.S. have focused solely on the instruction of MSA (Al-Batal, 1992). They have produced students with a level of competency in reading and writing, occasionally emphasizing oral and listening skills in MSA. However, when these students are

exposed to real-life use of Arabic, they are surprised by how little they can understand or communicate, or what happens when they use their university-acquired language skills: "It is also not uncommon for native Arabs to snicker at foreigners who only speak the formal language, thus potentially causing a sense of humiliation" (Palmer, 2007, p. 112).

Development of a learner's communicative competence requires a level of sociolinguistic competence, and the "ability to understand the social context in which the language is used" (Al-Batal, 1992, p. 290). In any language, appropriate choice of vocabulary, structure, and tone are important in communicating a message. Due to its diglossic nature, the range of registers in Arabic is broader than in non-diglossic languages, making these choices are more complex for learners of Arabic (1992). Those who have only studied MSA end up missing out on much of the lived culture of the Arab World. Palmer sums up this challenge by saying "The very culture and language the students are trying to study is somewhat off-limits to those who do not speak the appropriate code or register" (2007, p. 112).

While it is important that learners (and teachers) do not ignore the need for the development of CA ability, it is also important that they do not go to the other end of the spectrum and completely ignore MSA. Al-Batal (1992) argues that for true sociolinguistic competence, learners must be able to understand MSA as they would encounter it in day-to-day life in the Arab World and should be able to speak in a formal register with the appropriate word and grammar choice. As previously discussed, native speakers of Arabic tend to adjust their speech when talking inter-dialectically (Holes, 2004), so learners' growth in Arabic should include usage of appropriate standardized terms. In addition to inter-dialect assistance, most learners also want to reach a basic level of literacy (Al-Batal, 1992), and in Arabic, reading and writing are

skills that generally fit within the curriculum of an MSA class and would not be taught in a strictly-colloquial course.

2.2.2 Pedagogical implications

Whether learning Arabic in their home country or an Arab country, the sociolinguistic implications of diglossia are not the only challenge faced by learners. When it comes to the process of learning, I have observed that some programs attempt to teach both MSA and CA simultaneously, which can confuse learners. Issues with phonology differences between the two varieties and with learner motivation are also significant pedagogical implications of diglossia.

The differences between MSA and CA are significant enough that learning both varieties will take concerted effort. While usage of MSA may fall more along the lines of a register continuum than a strict diglossia, a study by Ibrahim (2009) showed that for native speakers of Palestinian Arabic, learning MSA was more like learning a second language than simply learning a more formal register of their first language. It cannot be expected that learners of either CA or MSA will spontaneously acquire the other variety by immersion. In many cases, students will need to learn two sets of (occasionally overlapping) vocabulary items, grammatical rules, and phonological features, which means students face a longer period of study in order to gain proficiency in both varieties (Al-Batal, 1992).

In addition to the complex issue of trying to learn two languages, learners face the challenge of differing phonologies. Arabic morphology and phonology are closely tied. A word's syllable structure is directly related to its meaning and grammatical function. In an extensive paper on Arabic phonology and the L2 learner's experience, Haddad (2006) describes how a student who first learns MSA phonology and then attempts to learn a variety of CA, "embarks on an etymological journey, a journey that ends with a grammar that is, not only different from, but

also more demanding than the grammar that the native speaker has" (2006, p. 148). While the reverse (learning CA first, then learning MSA) can also be challenging, Haddad argues that if CA is learned first, at least the learner's mental representation of the grammar will be more similar to the native speaker's, and his or her speaking ability in CA will be stronger (versus having a strong speaking ability in MSA, which is not common even among native speakers of Arabic).

Finally, the issue of motivation is a significant factor in the discussion of whether students should focus on learning MSA or CA first. Long-term student motivation leads to language success (*see* Dörnyei, 2005), and a student's approach to Arabic diglossia is directly related to his or her motivation. A 2004 study of Israeli elementary students showed that those who learned CA before learning MSA reflected more positive attitudes toward Arabic and Arab culture, as well as increased motivation to continue study of Arabic in later grades, because they had learned a variety of language that allowed them to interact in the community (Donitsa-Schmidt, Inbar, & Shohany, 2004). The challenge of motivation is not just relegated to children learning Arabic. A 1974 pilot study by Hamdi Qafisheh looked at two different programs—one in the United States and one in the Arab Gulf—and examined students' experience over the course of four years in studying both MSA and Gulf Arabic (GA). Some students were assigned to study GA for their first year, while others were assigned to study MSA in their first year. Each group went on to study the other variety in their second year. Qafisheh (1974) found that those who began with GA were more motivated and engaged in the class, had a higher retention rate, and the class experienced a lower dropout rate than the class that started with MSA. Those who focused on GA also had higher motivation because their ability to engage in local culture was stronger than that of the MSA students.

2.2.3 Implications of diglossia within the theoretical framework

Sociocultural approaches to SLA would argue that variety choice should be made based on which variety will best facilitate the learner's participation in the speech community. Looking at first language (L1) development as a model for second language (L2) language growth, this model advocates for an approach that allows learners to communicate with members of the COP from the earliest stages in order to facilitate growth as a legitimate peripheral participant. In the case of Arabic, this would mean choosing first to learn a local dialect that will encourage growth in the community (rather than using MSA from the beginning, which members of the COP see as inappropriate for informal settings). Learners' growth should reflect the same process of language acquisition that community members face—first learning a colloquial variety through interaction, then learning MSA by reading, writing, and instruction, which is also facilitated by expert-novice collaboration in the learner's ZPD. Finally, SCT posits that growth best happens in the context of a trusting relationship. In diglossic situations, the L variety (colloquial Arabic, in this case) is the language of relationships. Arabs use MSA to communicate in specific domains, but the relationships that are necessary for legitimate participation mandate the use of CA from early stages.

2.3   Implications of Dialect Variety

2.3.1 Implications of dialect variety for language learners

Learners who strive for communicative competence in Arabic will eventually face the issue of the diversity of Arabic dialects both in the Arab World as well as around the world where Arab immigrants have settled. Watson (2002) argues that eastern and western dialects are mutually unintelligible. In contrast, Al-Batal (2018) proposed that exposure to media from

around the Arab World allows for greater understanding of cross-dialect speech. For example, even though Syrian Arabic is very different from Moroccan, Al-Batal discusses a Turkish soap opera dubbed into Syrian Arabic that has gained popularity across the Arab World, even in Morocco. The opposite phenomenon does not apply since there is very little internationally-released Moroccan media.

Although Arabic learners do not have the same years of exposure to dialect variety that native speakers have, Al-Batal & Belnap (2006) suggest that learners should be able to transition between geographically-close dialects with relative ease. They expect that learners who have been exposed to either Levantine or Egyptian dialects will be likely to understand the other, since the two dialects have similar vocabulary and phonology. The only empirical study published on this topic is by Trentman (2011) and will be discussed in section 2.4.2.

In my experience as a language learning consultant in the Arab World, I have noticed that many learners anticipate needing to know more than one dialect of Arabic. In fact, 81% of participants in this study confirmed that they either have already learned more than one dialect or expect to learn an additional dialect in the future. Some learners begin their study in one country (where Arabic programs are available) and then transition to another country (with less availability), transferring dialects through private tutoring. Others have anticipated working in one Arab country, but their jobs have taken them to a different country.

2.3.2 *Implications of dialect variety within the theoretical framework*

As discussed in section 2.1.2, within the sociocultural framework, each community that shares a particular dialect of Arabic is a distinct COP, and for learners to transition from one community to another, they will need to learn to participate in shared life and meaning-making with members of that community. Learners who become full participants in a COP that speaks

one dialect will—at first—be able to participate only peripherally in communities that speak

another dialect. The artifacts (language) by which one dialect community mediates their life and

experience will be different from those of another COP (Swain, et. al., 2015). As learners in one

community become fully-developed participants, they can develop skills similar to those that

members use to join in inter-dialect meaning making with members of other dialect

communities. Approaches that aim to codify and teach this inter-dialect variety, like instruction

of Formal Spoken Arabic as advocated by Ryding (1991) and discussed in section 2.4.2, are not

in line with SCT because they ignore the learner's process of integration from being a peripheral

participant to being a full member of the community with inter-dialect skills.

2.4   Diglossia and Dialects of L2 Learners Approached

2.4.1   Approaches to diglossia

Arabic programs have taken a variety of approaches in addressing the issue of diglossia. Al-

Batal (1992) outlines five of these approaches. First, the *Classical Approach* focuses on teaching

religious and medieval texts, while virtually ignoring the oral component of language. The *MSA*

Approach has been widely used in university programs and emphasizes reading, writing, and

grammar rules. Because it uses MSA as the language of instruction, it does not reflect the true

linguistic situation of any Arab country. The *Colloquial Approach* solely focuses on oral skills,

using transliteration rather than Arabic script. Colloquial-only courses limit the development of

proficiency since normal native-speaker use includes MSA in certain domains. The *Middle*

Language Approach advocates for the use of what Ryding (1991) calls "Formal Spoken Arabic."

This approach presents a type of language created from a combination of MSA and Levantine

CA and will be addressed in section 2.4.2 on approaches to dialects. Finally, the *Simultaneous*

Approach is closest to the approach that I have seen used in many L2 classrooms in the Arab World. The curriculum focuses the first units on CA, and eventually introduces MSA, teaching the two varieties simultaneously, gradually increasing the proportion of MSA throughout the course of the program.

Al-Batal's recent volume (2018) advocates for the *Integrated Approach,* an approach that removes the "firewall" between MSA and CA, integrating the two varieties in the classroom as they are integrated in use in the Arab World. Al-Batal argues that this integrated approach is a more accurate reflection of the changing realities of Arabic use. With greater popularity of dialect-dubbed foreign movies and television shows, use of CA in writing on social media, and mixing of varieties on radio or television talk shows, the Arabic that Arabs are using—even across dialects—is not dichotomized into two separate languages or even registers. Al-Batal also argues that integrating a variety of CA into the MSA classroom is in line with current trends in language teaching, which emphasizes the need for communicative activities that reflect the real world, allowing students to approach language and culture simultaneously. Much of Al-Batal's volume contains reports from practitioners who have worked with the *Integrated Approach* with varying results, yet all pointing toward one argument: Integrating colloquial dialects into the Arabic classroom is absolutely necessary.

2.4.2 *Approaches to dialects*

The issue of dialects is challenging for non-immersion Arabic programs and has remained unaddressed in many western universities where programs offer only MSA instruction. As best practices (*see* Al-Batal, 2018) move toward integration of a dialect of CA into the MSA classroom, the natural question is "Which one?" Learners who are interested in studying abroad

also ask the same question, since most study abroad programs include a focus on the local dialect. Minimal research exists regarding dialect choice in the field of Arabic study.

Ryding (1991) suggests that rather than teaching any one dialect of CA, programs should teach Formal Spoken Arabic (FSA), which she describes as a koinized variety of Arabic that native speakers from various countries use with each other (other literature refers to this as "ESA," Educated Spoken Arabic). FSA, as it is codified in Ryding's textbook, includes Levantine vocabulary that is common to several dialects and has fewer words that are especially localized. It also chooses some grammatical features from colloquial varieties (like omitting case endings) and some grammatical features from MSA (such as the internal vowelization patterns).

While Ryding's work, and other advocates for FSA, may seem to present the "most pragmatic pedagogical approach" (1991, p. 215), FSA instruction emphasizes just one side of communicative competence—the student's ability to speak and be understood. I argue that, while this skill is important, if students are going to live in the Arab World, they will need to put concentrated effort into comprehension. Since native speakers mostly speak a vernacular variety of Arabic (using some form of a spontaneously-constructed inter-dialect when they are talking with speakers of other dialects), those who only learn FSA will still be at a loss for well-rounded communicative competence. Rather than focusing on learners' production of language, practitioners need to examine practices that will allow learners to better understand both the dialect they are studying as well as unfamiliar dialects.

The only published study on the L2 implications of Arabic diglossia and dialect variety is a 2011 study by Emma Trentman. Trentman used audio recordings from five different colloquial varieties, as well as MSA, to test learners' listening comprehension. She was looking specifically at which was a better predictor of comprehension an unfamiliar dialect: comprehension ability in

MSA or comprehension ability in a familiar dialect. She found that in most cases, familiar dialect ability was more helpful than MSA ability for understanding an unfamiliar dialect. The exception was when the speaker of the unfamiliar dialect was making accommodation towards MSA, in which case MSA ability was also helpful in unfamiliar dialect comprehension.

Trentman's study aimed to give empirical evidence for teachers' and students' anecdotal experience that if a student learned one dialect, it would be relatively easy to transfer to another dialect. It is notable that, regarding accommodation, when Trentman elicited the recordings she used for the assessment, she found that speakers were accommodating towards her as a non-native speaker. While this will likely be the experience of learners entering a new dialect, those who aim to understand native speakers as they talk with each other will need to have a level of understanding that does not factor in accommodation.

2.5   Gaps in the Literature

Much of the research on Arabic language learners has been done in environments where students are primarily learning MSA and where, in some cases, dialect studies are integrated into the classroom (*see* Al-Batal, 2018; Al-Batal & Belnap, 2006; Alosh, 2007; Badawi, 1985; Khaldieh, 2001; Palmer, 2007; Ryding, 1991; and Trentman, 2011). None of these studies involve students who have studied full-time in the Arab World with a strong focus on CA. Some learners in study abroad environments focus first on MSA, and some focus first on CA. How does that focus impact their learning?

Trentman's study is the only known published work on L2 learners and Arabic dialect comprehension. However, her study was limited in its scope to learners who had studied MSA, Levantine, and Egyptian Arabic, and most participants had studied in the United States. No published studies exist related to Arabic learners' understanding of various dialects in study

abroad environments. Trentman's study also acknowledged and addressed the issue of accommodation. The study presented in this paper eliminates the issue of accommodation by using recordings made for native speakers that have been posted to social media.

Similar to Trentman's research, this study looks at the impact of learning practices on a student's ability to understand a variety of dialects. Rather than looking only at learners who studied just MSA or a combination of both MSA and CA, this study looks at learners who have studied different dialects of CA, as well varied levels of focus on MSA. The first part of the study examines learners' focus on MSA throughout each semester of study and analyzes whether high or low MSA focus helped them to understand an unfamiliar dialect of CA. In addition, this study seeks to explore which dialect will most effectively assist learners in understanding other varieties of CA, which will give language programs in the United States, and Arabic learners who are seeking to learn other dialects, clarity regarding which dialect will be most helpful for transfer.

2.6   Hypotheses

The first research question in this study asks, "What is the relationship between a learner's focus on MSA and his or her ability to understand an unfamiliar dialect of Arabic?" I had two hypotheses for this research question.

H_{1a}: Learners who had a high focus on MSA early in learning will have a lower comprehension ability in an unfamiliar dialect than those who had a low focus on MSA early in learning. Because varieties of CA share various features that are not shared with MSA, a high focus on CA (and low focus on MSA) will help learners understand unfamiliar dialects.

H_{1b}: Learners who had a high overall focus on MSA will have lower average ability in CA—including familiar and unfamiliar varieties—than learners who had a low overall focus on

MSA. Because low MSA focus implies high CA focus, those with high focus on CA will have listening comprehension skills that will transfer between familiar and unfamiliar varieties.

The second research question asks, "Which dialect of CA best prepares learners to understand unfamiliar dialects?" I hypothesized the following results:

H$_{2a}$: Ability in Egyptian Arabic (EA) will positively predict ability in other eastern dialects.

H$_{2b}$: Ability in Levantine Arabic (LA) will positively predict ability in other eastern dialects. These two hypotheses are based on Al Batal & Belnap's proposal (2006) that learners who study either EA or LA should be able to transfer to the other dialect with relative ease. Trentman (2011) confirmed this idea empirically by showing that understanding ability in either EA or LA was a significant predictor of understanding ability in the other dialect.

H$_{2c}$: Ability in Gulf Arabic (GA) will positively predict ability in other eastern dialects. Because GA shares many features with other eastern dialects (Watson, 2002), there should be a positive relationship between GA scores and other eastern dialect scores.

H$_{2d}$: Ability in North African Arabic (NAA) will not predict ability in eastern dialects. Watson (2002) considers eastern and western dialects to be mutually unintelligible, so it is not likely that there would be a positive relationship between these scores.

CHAPTER 3

METHODOLOGY

3.1   Research Approach

The research approach for this study is quantitative due to the extent of the variety among participants. Qualitative research has an important place in language acquisition research, and many researchers have chosen to conduct interviews with individual students who have excelled or struggled in language learning. As a language learning consultant, I have found that the issue of individual differences (*see* Dörnyei, 2005) plays a significant role in language learning. Aptitude, motivation, and language program differences are just three of the many factors that influence a learner's proficiency and learning experience. Qualitative approaches to research in the field of language acquisition look deeply into the experiences of a small number of learners, which can give helpful insights into strategies that facilitate success. For this study, I chose to use a quantitative approach in order to gather a broad sample of learners and test which learning variables are influential in unfamiliar dialect understanding without focusing on individual differences such as motivation or aptitude.

3.2   Comprehension as a Measure of Transferability

The measures of ability in this study are restricted to listening comprehension. There are several reasons why I have chosen to use comprehension as a measurement for dialect transferability. First, measuring comprehension is more straightforward and quantifiable than measuring production. While reading comprehension is relatively easy to measure, it would not be a good measure of dialect transfer since dialects of Arabic are primarily spoken (not written),

and reading comprehension does not necessarily indicate listening comprehension. In this paper, the term comprehension will primarily indicate listening comprehension (not reading) unless otherwise indicated.

In addition to being a natural testing variable, comprehension as an indication of overall language performance has theoretical backing in both cognitive and sociocultural approaches. While this paper is primarily informed by sociocultural theories of SLA (see Chapter 2 for a full discussion of this topic), cognitive approaches consider comprehension skill a good measure of a learner's ability to transfer to a new dialect. Researchers and practitioners both recognize the significant role of input in SLA. The importance of input is both fundamental and well-accepted. VanPatten & Williams (2014) list ten common observations regarding phenomena in SLA and examine several theories in light of how each explains these phenomena. The first two observations are that exposure to input is necessary and much learning happens incidentally. These assumptions are not only intuitive, but most researchers and practitioners agree that an emphasis on input is important.

Shintani, Li, & Ellis (2013) discuss how the skill of comprehension has received less attention than that of production in both research and practice. Other researchers have called comprehension the "Cinderella" skill in SLA—a skill that has been long ignored (Vandergrift, 1997). At the same time, Shintani, et. al. (2013) explain that linguists who emphasize comprehension—such as Stephen Krashen, Tracy Terrell, and Harris Winitiz—have received significant criticism due to extreme ideas about the sufficiency of input for SLA. VanPatten (1996) has advocated for more moderated views of comprehension that include structured forms of input that draw learners' attention to specific forms and meanings. Input is most definitely

necessary but is likely not sufficient for full growth (VanPatten & Williams, 2014). Learners also need to speak and interact.

In line with cognitive approaches, Laufer & Goldstein (2004) discuss how tests of vocabulary size have been shown to be a good indicator of learners' overall language proficiency. Both a learner's speaking vocabulary (what Laufer & Goldstein call *active recall*) and his or her comprehension vocabulary (*passive recall*) are legitimate measures of vocabulary quantity and strength. In their study of 435 high school and university L2 English students, Laufer & Goldstein (2004) found that comprehension vocabulary was the best predictor of students' overall L2 proficiency in the classroom. Passive recall was a better predictor than active recall (a student's ability to produce a word from memory in the L2). A learner's overall L2 proficiency is directly correlated to his or her ability to understand words.

Socioculturally, it makes sense that learners' comprehension ability would be a good indicator of their potential to learn a new dialect. As their ability to understand grows, the number of possible relationships that are in the learner's ZPD also grows (Swain, et. al., 2015). For example, when the learner is first beginning, he or she may only have the ability to interact with a paid teacher. However, the more the learner grows in his or her ability to understand, the more community members are willing and able to interact with the learner in a way that brings meaningful growth, adopting the learner as a viable part of the community. The broader the learner's ability to understand, the more people will be able to help him or her become a legitimate participant in the COP (Wenger, 1998).

Interaction in the ZPD is expected to take place between a novice (the learner) and an expert (the native speaker). While this interaction is most definitely two-way (1998), listening and observing are primarily actions of the novice. As the learner listens carefully and engages in

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negotiation of meaning, he or she is gathering information regarding the use of cultural artifacts—including language—in the new dialect community. The meanings of these artifacts are likely different (even words that are made up of the same phonemes) from those of the COP of the previous dialect.

In addition to theoretical reasons for comprehension as a measure for dialect transferability, there are two practical reasons in the context of Arabic SLA. First, native speakers understand each other within their dialect group (eastern or western) and speakers of western dialects can understand eastern dialects due to media exposure and relatedness to MSA. Considering the general comprehensibility of eastern dialects, it is likely that wherever learners go in the Arab World, those who have studied eastern dialects will be generally understood. However, because learners do not have the same media exposure and years of experience that native speakers have, they will not automatically understand speakers of other dialects. Comprehension will take special effort. A learner may be able to make himself understood within a new community, but without a strong comprehension ability, he will be lost in the group interactions that happen in that particular dialect. Therefore, the learner's ability to understand is a good measure of how well he will be able to adjust his own speech to that of the new speech community.

Second, learners who have focused primarily on production and then transition to a new dialect may find that the production-oriented resources they used in their first dialect (such as traditional classrooms and textbooks) may not be available in the new dialect—which may be the very reason they chose to study a different dialect before moving to the next country. In order to adapt their production skills, learners will need to have strong comprehension ability that will allow them to listen to the way native speakers talk to each other.

This study used comprehension of speech made for native speakers of each dialect because when learners are in a new dialect environment, people who are speaking directly to them will tend to accommodate their speech, adjusting for the learner's ability and/or first dialect. A learner's ability to understand the type of speech that native speakers use with each other will be a good indication of their future production ability in the new dialect.

3.3   Strategy & Research Design

The design of this study was highly influenced by Trentman's study (2011). Ideas for the listening assessment, online collection, and analysis were inspired by Trentman's significant work. This study also represents three specific areas of expansion or methodological innovation on Trentman's work. First, Trentman looked at the correlation between MSA ability and familiar CA ability and how it predicted the participant's understanding of an unfamiliar variety of CA. This study is examining the relationship between MSA focus (a self-reported learning history variable, rather than an ability variable) and the participant's ability to understand unfamiliar Arabic. One reason for using this variable is the challenge of measuring listening comprehension in MSA. The Arabic listening test (as discussed in section 3.4.1) used audio clips made from native speakers of each dialect. Since MSA does not have native speakers (but is learned in school), spoken MSA is highly influenced by the colloquial variety of the speaker. Therefore, it would be difficult to assess a learner's MSA listening comprehension without factoring in the speaker's colloquial variety.

Second, Trentman's study was conducted within the United States with learners who had primarily studied in a university context. This study involves participants who have all learned Arabic in study abroad environments. Finally, Trentman's listening assessment used audio clips that she elicited from native speakers of different dialects of Arabic, all of whom knew her to be

a proficient (L2) speaker of MSA and Egyptian Arabic. She acknowledged the accommodation towards MSA and included this as a factor in her analysis. This study, however, uses audio clips that were made for native speakers (rather than elicited by a non-native speaker), so the speakers are not accommodating toward MSA or another dialect.

3.3.1 Data collection

Data was collected through an online survey and assessment administered through Qualtrics, an online research portal. Collecting data online allowed for Arabic learners living around the world to participate in the study, which was necessary because the study was looking at participants who had studied Arabic in study abroad environments. Because the assessment was only for listening comprehension, there was no need for the researcher to meet the participants face to face to assess speaking ability.

3.3.2 Participants

The sample for this study was self-selecting based on the participants' response to the invitation to participate. Participants were recruited through personal networks, social media posts, and advertisements at language centers. Participation was open to any learner of Arabic who had studied in the Arab world for at least one semester (four to six months). Because participants self-selected into the survey, the sample is not representative of all Arabic language students in study abroad situations. For example, learners who perceived their abilities to be particularly low may not have volunteered to participate in this assessment. However, the variety of responses shows that the sample is reasonably representative. For example, the sample represents a full range of learners (including those who only studied four months up to those who

had lived in the Arab World for more than 30 years) and assessment scores (ranging from zero to 94).

The online test was published on November 10, 2018, and closed on January 31, 2019. A total of 109 Arabic learners completed the assessment and questionnaire. During the initial analysis, three observations were removed: one was a pilot tester who had exposure to the test, so his results were not valid. Another removed participant was born in Jordan and learned Arabic as a child, therefore he or she did not have the same experience as other participants who had learned Arabic as a second language. The third removed observation was a participant who listened to several of the recordings more than once (determined based on time per page and number of clicks). The final number of observations included in the analysis was 106.

The questionnaire included questions of learning history (see section 3.4 for a brief description and the Appendix for the full questionnaire). It did not include significant personal history of learners such as age, mother tongue, or other languages spoken. This was an unfortunate oversight, as this information would have been useful to fully describe the demographic information of the sample population.

The sample population was broad, including learners who had lived in the Arab World for a range of 4 to 400 months in four distinct linguistic regions of the Arab World. It included learners who studied at a variety of programs using various approaches to language learning. Table 1 shows the groupings of participants by primary dialect studied (columns) and by which dialect was unfamiliar (rows). See the section 3.5.3 for a discussion of how familiarity was determined.

Table 1. Participants by studied and unfamiliar dialects

	Studied NAA	Studied EA	Studied LA	Studied GA
Total	12	17	49	28
NAA is Unfamiliar		10	44	21
EA is Unfamiliar	9		23	15
LA is Unfamiliar	11	10		15
GA is Unfamiliar	12	12	19	

3.4 Instrument

3.4.1 Arabic listening test

All participants completed the Arabic listening test. This listening test was based on a measure of comprehension called the Immediate Recall Protocol (IRP), in which learners are exposed to a text then asked to write down what they can recall from memory. In this assessment, learners heard a short clip in Arabic and on the following page wrote what they understood in English. This measure of comprehension (IRP) has been used in L1 reading comprehension (Johnston, 1983), L2 reading comprehension (Khaldieh, 2001), and in L2 listening comprehension (Iskold, 2008). Some researchers (Chang, 2006; Johnston, 1983) have expressed concern regarding the use of IRP as the only measure for students' comprehension. However, since this assessment was not set to measure an individual's complete comprehension skills, but rather to compare comprehension ability between learners, IRP was a good choice for this assessment. As discussed in section 3.2, Laufer & Goldstein (2004) found that passive recall (a learner's ability to demonstrate understanding of an L2 vocabulary term) was a significant predictor of his or her overall L2 proficiency—better than active recognition (in which the learner would pick out the correlated meaning from a set of four options). Thus, the benefits of

IRP made it a better candidate than multiple-choice comprehension questions, which could produce inconclusive results and would not necessarily indicate comprehension ability.

The test consisted of audio clips in four different dialects of Arabic: Moroccan Arabic (representing North African), Egyptian Arabic, Jordanian Arabic (representing Levantine), and Kuwaiti Arabic (representing Gulf). These four dialects were chosen based on Nydell's (1994) classification of Arabic dialects into five regions—the four regions stated above, as well as Iraqi (as discussed in section 1.1.2). Though the questionnaire asked about exposure to Iraqi Arabic, it was not included in the listening test due to the small number of learners who have studied in Iraq.

Audio clips were extracted from videos or audio that had been uploaded to social media platforms (Facebook, YouTube, and iTunes Podcasts). Both native Arabic speakers and pilot testers (learners) listened to samples of the speakers in the clips to verify that their speech was standard (for the local vernacular) and clear. The final clips chosen from each variety were from motivational speakers encouraging listeners to somehow better themselves. Therefore, though clips had semantic variation, they were similar in audience and register.

Determination of clip length was based on semantic value rather than the number of seconds. Each word was assigned zero to two points based on its semantic content. For example, content words that contained a possessive pronoun suffix were assigned two points. Words that were repeated in the clip were only assigned a value once. Each full clip contained a total of 50 semantic points.

Two pilot tests were used in the development process for the final test. The first pilot test was in Levantine Arabic and was administered to 16 learners. This pilot test allowed for the development of the instrument and for learners to give feedback regarding their experience of the

assessment. The audio clips in the pilot assessment were similar to the final Levantine Arabic clips, but did not include the same content, so some of the first pilot testers participated in the study. The second pilot test was administered to two pilot testers and consisted of the final version of the assessment; results of the two pilot testers were not included in this study.

3.4.2 Background questionnaire

The purposes of the background questionnaire were to determine familiarity with various dialects and to quantify learning history as it related to focus on MSA (see section 3.5.3 for details). The full questionnaire can be found in the Appendix; it included questions addressing:

- Locations of study and length of study

- Type of study (full-time or part-time)

- Months lived in each location

- Focus on MSA and CA in each semester of study

- Nature of exposure to dialects not studied

- Time spent speaking in the community and doing written homework in each semester of study

- Experience regarding the learning of additional dialects

- Self-rated comfortability in various reading tasks

- Programs attended and length of each

3.5   Data Collection & Analysis Methods

3.5.1   Administration of instrument

Prior to completing the listening test or questionnaire, participants gave informed consent after reading an introductory statement that included a brief description of the study and instructions for taking the assessment (including the importance of only listening to each clip once, which was monitored by a timer and click tracker).

Participants completed the listening assessment before filling out the questionnaire. The average time required for the assessment and questionnaire was 36 minutes. The four different dialect tests were played in randomized order for each participant. For each dialect, participants heard the clip in its entirety two times in order to hear the entire context. They then heard the clip in five short segments, with each segment repeated twice. After they heard each short segment, they wrote on the following page (in English) what they understood and remembered from each segment.

After completing the listening assessment, participants responded to the questionnaire. I chose to follow standard practice in placing the questionnaire after the assessment. However, after analysis of the questionnaire, I recognized that it is possible that participants' feelings regarding performance on the assessment may have influenced their self-assessment regarding reading ability (for example, those who felt they did poorly on the listening assessment may have given a higher self-rating on reading proficiency). However, since the results of the self-reported reading ability were mostly inconclusive and not included in the final analysis, the order of the assessment and questionnaire did not appear to have an impact on the results of this study.

3.5.2 Scoring of listening assessment

Results were scored on a point system based on word-by-word understanding as well as understanding of the entire idea. I designed the scoring key with the help of advanced students of various dialects and native speakers of Arabic. Each word was given a rough English translation and point value, with each clip containing a possibility of 50 points for semantic content, as previously discussed in the Instrument section (3.4). Each clip also contained an additional 50 points that were given or withheld based on comprehension of the general idea of the segment. Most of the time, the "idea" score matched the semantic score, but occasionally an extra one or two points were added to a segment if the participant missed specific words but thoroughly captured the idea of the text.

Scoring took place over a period of three weeks after most results had been collected. When scoring assessments, I did not look at any identifying information such as primary dialect studied or learning history and I made determinations of appropriate word choice and meaning scores based solely on the set rubric. As results were collected, scores for each of the four dialect tests were added to the Qualtrics data system online.

3.5.3 Coding of questionnaire

Familiarity of different dialects was determined based on responses to the following questionnaire items:

- Dialect known best

- Regions where participants had lived

- Self-rated familiarity (ranging from "not familiar at all" to "very familiar")

- Exposure to each dialect through study, relationships with native speakers of that dialect, visiting the region of the dialect, and media.

Participants who indicated that a particular dialect was "not familiar at all" were marked as unfamiliar with that dialect, and those who indicated it was "very familiar" were marked as familiar. Determination of familiarity for those who indicated a dialect was "slightly familiar" or "moderately familiar" was based on the answer to the question about exposure. Because social interaction is very important for language learning (*see* Eun & Lim, 2009 and Lytle & Kuhl, 2017), I marked participants who had lived in the region where that dialect was spoken and/or had friends who spoke to them in that dialect as being familiar with that dialect of Arabic, while those who had visited (but not lived in) a country where a dialect was spoken or had been exposed to the dialect only through media were considered to be unfamiliar with that dialect due to lack of significant and sustained interaction.

Participants' Primary Dialect Studied was determined by their response to the question "Which variety do you know best?" If participants gave more than one answer, selection was based on the dialect that the participant spent the most time studying.

In addition to determining familiarity with various dialects of Arabic, the background questionnaire looked at learners' focus on MSA by semester. Since learners' ability to understand input changes throughout their course of study, I chose to focus on each semester of study for a learner's first two years. Timing of focus on MSA was one of the significant independent variables in this study. Since many of the programs I have visited operate on a

semester-based program, I chose to use this categorization so that learners could easily indicate history based on timing. The questionnaire asked participants who studied full-time (15 hours per week or more) to indicate focus on MSA for four different time frames: Semester 1 (months 1-6), Semester 2 (months 7-12), Semester 3 (months 13-18), and Semester 4 (months 19-24). For example,

- In months 7-12 of Arabic study in the Gulf, approximately what percentage of your class time was focused on Gulf Arabic and what percentage was focused on MSA?

The response to this question required a sum of 100%. Therefore, if a participant indicated that the class time had been focused on MSA 60% of the time, then the response to focus on Gulf Arabic would have been 40%.

In addition to the questions about semesters, all participants (both part-time and full-time) responded to a question about overall MSA focus. For example,

- During your overall time of Arabic study in the Gulf, approximately what percentage of your class time was focused on Gulf Arabic and what percentage was focused on MSA?

Coding of MSA focus data included a breakdown of the percentage of focus on each variety by semester, reported "overall" focus, and the average of the four semesters' focus.

For each of the comparisons of means discussed in section 3.5.4, emphasis on MSA was divided into "High" and "Low" based on the median response. For example, if the median reported focus on MSA for Semester 1 was 20%, then responses below 20% were considered "low MSA focus" and responses equal to or above 20% were considered "high MSA focus." I chose to use the median focus on MSA as the measure of central tendency rather than the mean because the mean is more sensitive to outliers.

3.5.4 *Model choice and analysis method*

The data were coded and managed in Microsoft Excel, and statistical analysis was conducted in IBM's software Statistical Package for Social Sciences (SPSS). The following four sets of analysis were conducted using various subsets of the data:

1. Related Dialect Transfer Analysis

2. Less-Related Dialect Transfer Analysis

3. Multi-Dialect Comprehension Analysis

4. Dialect Transferability Analysis

Research Question 1 was concerned with the relationship between focus on MSA and the learner's ability to understand unfamiliar dialects. Because the questions about MSA focus in each semester of study only were presented to participants who had studied full-time, the model for the first three analyses only included those participants who had studied full-time.

As previously discussed, dialects of Arabic can be divided into western dialects and eastern dialects (Watson, 2002). Following the east-west division, this paper defines *related* dialects as Egyptian Arabic (EA), Levantine Arabic (LA), and Gulf Arabic (GA), considering North African Arabic (NAA) to be *less-related*. The Related Dialect Transfer Analysis (section 0) looks at learners who studied EA, LA, and GA (eastern dialects) and how they scored on tests of those same dialects when they were unfamiliar. The Less-Related Dialect Transfer Analysis (section 4.3) looks at how learners of eastern dialects scored on the NAA test when NAA was unfamiliar.

Related Dialect Transfer Analysis and Less-Related Dialect Transfer Analysis looked at groups of students who had studied full-time for at least four semesters. This subset was chosen because there was a significant increase in mean scores for this group as shown in Table 2.

Selection based on semester of study also helped to control for the significant difference in

learning experience between all participants.

Table 2. Scores of primary dialect studied and average scores by semester

	1 Semester of study	2 Semesters of study	3 Semesters of study	4+ Semesters of study
N	*12*	*15*	*24*	*40*
Score of Primary Dialect Studied	32	43	44	59
Average of 4 dialect tests	23	28	32	42

Table 3 shows the dialects that were studied (columns) and unfamiliar (rows) for the 40

participants who studied for four semesters. Blank cells indicate that no participant who studied a

particular dialect was counted as unfamiliar with that dialect.

Table 3. Participants who studied at least four semesters

	Studied NAA	Studied EA	Studied LA	Studied GA
Total	1	10	22	7
NAA is Unfamiliar		6	21	6
EA is Unfamiliar	1		9	3
LA is Unfamiliar	1	5		5
GA is Unfamiliar	1	6	13	

The Related Dialect Transfer case (section 0) looked at the scores of participants who

studied EA, LA, or GA and for whom one or two of those dialects were unfamiliar. If

participants had two dialects as unfamiliar, each score was counted as a separate observation to

maintain a larger sample size and to avoid choosing one unfamiliar dialect score over another.

This case looked at 41 unfamiliar dialect scores representing 29 participants. The Less-Related

Dialect Transfer case (section 4.3) looked at the 33 participants for whom NAA was unfamiliar.

The Multi-Dialect Comprehension analysis (section 4.4) examines all 40 participants who studied four semesters and their mean scores in (1) the primary dialect they studied and (2) the average of all four dialect scores. The primary dialect score is significant to the measure of transferability because Trentman (2011) showed that listening comprehension score in a familiar dialect of Arabic was a good predictor of listening score in an unfamiliar dialect (results of this study show similar results; *see* section 4.5). The average of all scores (multiple dialects) represents the learner's overall ability in the tests and how much he or she might be able to understand in a multi-dialect environment.

For the first three analyses, comparison of means (independent t-test) was conducted on a relevant subset of the data (participants who had studied at least four semesters). This method of analysis was chosen over multiple regression because of the limited number of observations in this subset. The fourth analysis examined all 106 observations, using multiple regression to determine dialect transferability while controlling for months lived in the Arab World, score in the primary dialect studied, and whether or not participants had studied the dependent dialect.

For analysis of statistical significance in this paper, a *p* value of less than 0.05 is considered statistically significant, and *p* values that are between 0.05 and 0.1 are considered marginally significant.

CHAPTER 4

FINDINGS

4.1 Descriptive Statistics

4.1.1 Means of dialect comprehension scores

Table 4 shows the means of test scores for each of the four listening tests. Scores are shown in three different groups. The first column, *Familiar*, represents the test scores of all participants for whom that particular dialect of Arabic was familiar (not necessarily studied—see section 3.5.3 on the determination of familiarity). The *Unfamiliar* column shows the mean scores for all participants for whom that dialect was unfamiliar, and the *All* column shows the means for all participants. The table also shows the average months spent in the Arab World for each grouping of participants, which was a control variable in the Dialect Transferability analysis.

Table 4 shows important patterns that attest the reliability of the instrument. For example, in every test case, the mean score of those who were familiar with the dialect was higher than the mean score of those who were unfamiliar with the dialect. Also, while it may appear that the gap between scores of those who studied NAA and scores of those who studied other dialects is large, it is important to note that the gap is still smaller than any of the ranges of scores in any one dialect. Range of scores is due in part to the variety of levels of participants. For example, though 29 people were listed as being familiar with NAA, only 12 participants studied NAA full-time, and only one completed four semesters of study in North Africa. In contrast, 22 participants who were familiar with Levantine Arabic completed four semesters of study in the Levant.

Table 4 might show that the NAA test was more difficult than the other tests, because the maximum score for those who were familiar with North African was 60 while the maximum on

the other three tests were all above 80. Alternatively, this contrast may be due to the small

number of participants who studied NAA for more than three semesters (N=4) and the overall

small sample size of participants who studied NAA (N=12).

Table 4. Means of dialect listening comprehension scores

Test		Familiar	Unfamiliar	All
North African Arabic	*N*	*29*	*77*	*106*
	Avg. mos. in AW	*53*	*61*	*59*
	Mean Score	**26.17**	**15.81**	**18.64**
	SD	15.34	9.40	12.18
	Min	4	0	0
	Max	60	50	60
	Range	54	50	60
Egyptian Arabic	*N*	*28*	*78*	*106*
	Avg. mos. in AW	*51*	*62*	*59*
	Mean Score	**46.89**	**31.55**	**35.60**
	SD	21.83	15.93	18.83
	Min	2	6	2
	Max	82	64	82
	Range	80	58	80
Levantine Arabic	*N*	*68*	*38*	*106*
	Avg. mos. in AW	*72*	*36*	*59*
	Mean Score	**51.46**	**20.42**	**40.33**
	SD	24.24	15.45	26.13
	Min	6	2	2
	Max	94	66	94
	Range	88	64	92
Gulf Arabic	N	*53*	*53*	*106*
	Avg. mos. in AW	*80*	*38*	*59*
	Mean Score	**47.91**	**31.45**	**39.68**
	SD	26.14	23.96	26.29
	Min	2	0	0
	Max	94	90	94
	Range	92	90	94

4.1.2 Average MSA focus by primary dialect studied

Table 5 shows the average of reported overall focus on MSA for 105 participants (one participant did not respond to the question about overall MSA focus). While only those who studied full-time responded to the questions about each semester of MSA study (*see* section 4.1.3), this table includes participants who studied part-time as well. Those who studied in Egypt focused the most on MSA in their overall course of study, while those studying in North Africa focused the least on MSA.

Table 5. Average MSA focus (overall) by primary dialect studied

	NAA	EA	LA	GA
N	*12*	*16*	*49*	*28*
Mean of MSA Focus	**5.42**	**41**	**26.92**	**35**
SD	12.33	29.62	20.94	24.69
Min	0	0	0	0
Max	40	100	70	100
Range	40	100	70	100
(Scale for mean of MSA focus is 0-100)				

4.1.3 Average MSA focus by semester

Table 6 shows the average reported focus on MSA (percentage) for each semester of study. The columns for each semester and the *Average* column represent only participants who studied Arabic full-time. I chose to restrict the sample to participants who had studied full-time because it is difficult for learners who are not part of a full-time program to keep track of specific details of learning history in a way that matches the timing of a full-time program. The *Average* column represents the average of the four semesters as listed. The *Overall* column is based on participants' answer to the question, "How much focus did you place on MSA overall?" This question was answered by both part-time and full-time participants (one participant did not answer the question).

This table shows that participants spent significantly more time focusing on MSA in semesters three and four than they did in semesters one and two. The minimum percentage shows that some participants did not focus on MSA at all throughout their course of study; the maximum of the average column shows that no students focused exclusively on MSA for all four semesters.

Table 6. Average MSA focus by semester

	Sem 1	Sem 2	Sem 3	Sem 4	Average	Overall
N	*91*	*79*	*64*	*40*	*90*	*105*
Mean of MSA Focus	**23.51**	**26.29**	**41.06**	**41.45**	**29.48**	**28.90**
SD	26.63	26.08	27.70	29.28	22.17	24.57
Min	0	0	0	0	0	0
Max	100	100	100	100	88	100
Range	100	100	100	100	88	100
(Scale for mean of MSA focus is 0-100)						

4.2   Related Dialect Transfer Analysis

For this analysis, EA, LA, and GA are considered *related* to each other as dialects of Arabic. As discussed in section 3.5.4, not only are these dialects mutually intelligible among Arabs, but the many features shared by these three dialects (including vocabulary, phonology, morphology, and syntax) make transferability easier for learners of any one of the dialects. This case looks at the impact of MSA focus on a learner's ability to understand dialects that are related to the dialect they studied. The analysis seeks to answer the question, "What role does MSA focus play in a learner's ability to understand a *related* dialect of Arabic when the learner has studied for at least four semesters?"

Table 7 and Figure 1 show the scores of learners who studied EA, LA, or GA for four semesters and for whom one or two of the dialects were unfamiliar (N=41). It is important to

note that twelve participants had more than one unfamiliar dialect, in which case they are included more than once in the analysis (each unfamiliar dialect score is considered an observation). This set of scores represents 29 participants. See section 3.5.4 for a discussion of this choice.

This test looked at each semester of study and the significance of MSA focus in each semester (see section 3.5.3 for a discussion of semesters as a timing mechanism). The largest difference in means was in MSA focus during Semester 1, which was only marginally significant (p=.093). Results for Semesters 2 and 3 are almost equal for high and low focus on MSA, showing that the difference is not statistically significant. Although only one of the independent t-tests is marginally significant (Semester 1), it is notable that for five of the six tests, scores of those who had low focus on MSA are still better than scores of those who reported high focus on MSA. The test that showed contrasting results (Semester 3) had a mean difference of just 0.39.

Table 7. Comparison of Related Dialect Scores for MSA focus by semester

Semester 1									
Mean of MSA focus=25%, Median of MSA focus=20%									
MSA focus	**% MSA focus**	**N**	**Mean**	**Min**	**Max**	**SD**	**Std Error**	**Mean Dif.**	**Sig**
Low	0-20%	21	45.43	14	86	20.28	4.43	10.93	.093*
High	21-100%	20	34.50	4	70	20.34	4.55		
Semester 2									
Mean of MSA focus=28%, Median of MSA focus=10%									
MSA focus	**% MSA focus**	**N**	**Mean**	**Min**	**Max**	**SD**	**Std Error**	**Mean Dif**	**Sig**
Low	0-10%	20	40.20	14	86	21.95	4.91	.20	.976
High	11-100%	21	40.00	4	72	20.19	4.41		
Semester 3									
Mean of MSA focus=38%, Median of MSA focus=40%									
MSA focus	**% MSA focus**	**N**	**Mean**	**Min**	**Max**	**SD**	**Std Error**	**Mean Dif**	**Sig**
Low	0-40%	21	39.90	4	86	24.15	5.40	.39	.954
High	41-100%	20	40.29	8	70	17.64	3.90		
Semester 4									
Mean of MSA focus=39%, Median of MSA focus=40%									
MSA focus	**% MSA focus**	**N**	**Mean**	**Min**	**Max**	**SD**	**Std Error**	**Mean Dif**	**Sig**
Low	0-40%	23	43.39	8	70	23.04	4.80	7.50	.257
High	41-100%	18	35.89	4	86	17.27	4.07		
Average of 4 Semesters									
Mean of MSA focus=32%, Median of MSA focus=38%									
MSA focus	**% MSA focus**	**N**	**Mean**	**Min**	**Max**	**SD**	**Std Error**	**Mean Dif**	**Sig**
Low	0-38%	21	42.76	4	86	23.47	5.12	5.46	.408
High	39-100%	20	37.30	8	70	17.75	3.97		
Reported "Overall" Focus									
Mean of MSA focus=34%, Median of MSA focus=40%									
MSA focus	**% MSA focus**	**N**	**Mean**	**Min**	**Max**	**SD**	**Std Error**	**Mean Dif**	**Sig**
Low	0-40%	19	42.32	4	86	23.50	5.39	4.13	.533
High	41-100%	22	38.18	8	70	18.52	3.95		
*(Scale for mean scores is 0-100). * indicates p<0.10 (marginal significance) ** indicates p<0.05*									
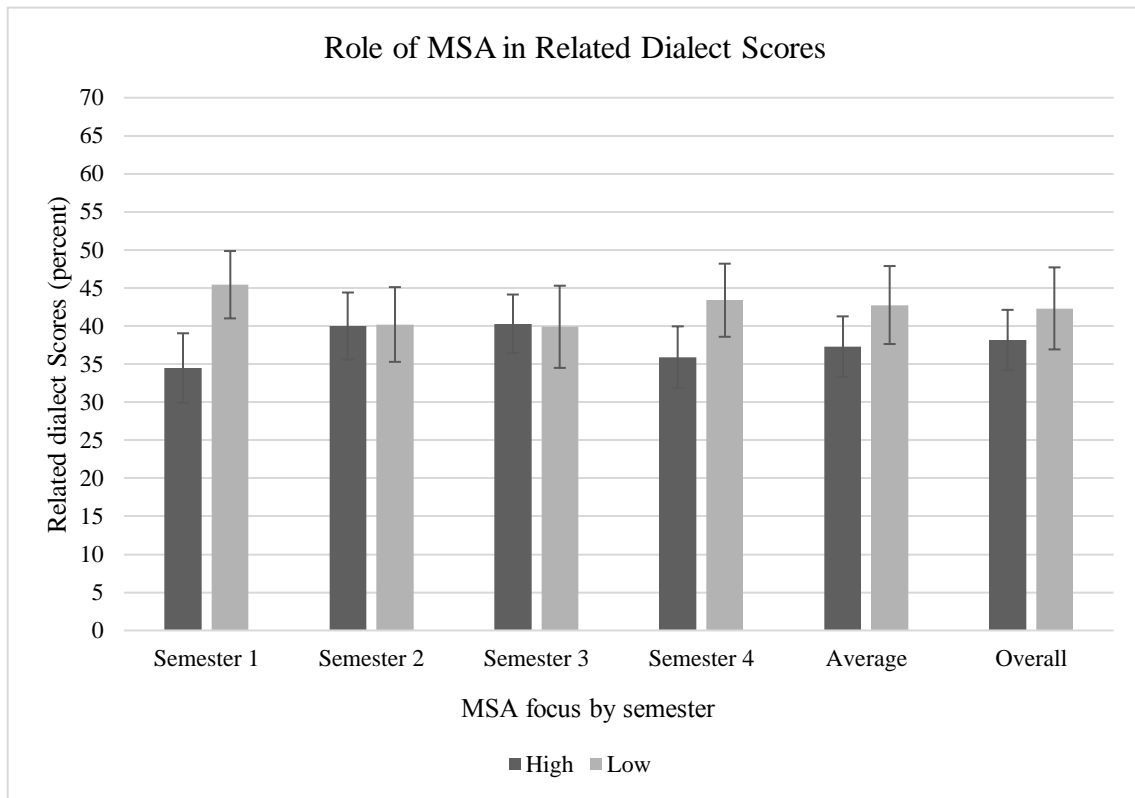
Figure 1. Comparison of Related Dialect Scores for MSA/CA focus by semester

4.3 Less-Related Dialect Transfer Analysis

As discussed in section 3.5.4, North African Arabic (NAA) is considered less-related to other studied dialects of Arabic. However, results of this study show that despite significant differences, learners of other dialects of Arabic still have a limited ability to understand NAA, even when the speaker is not accommodating his or her speech for the learner. This analysis looks at participants who studied Egyptian Arabic (EA), Levantine Arabic (LA), and/or Gulf Arabic (GA) full-time for four semesters, for whom NAA was unfamiliar (N=33). Participants are grouped by region in Table 8 and Table 9 and combined into one group for the t-tests shown in Table 10. This analysis seeks to answer the question, "What role does MSA focus play in a

learner's ability to understand a *less-related* dialect of Arabic when the learner has studied for at least four semesters?"

4.3.1   MSA role for four semesters of full-time study

Table 8 shows NAA scores by region of study (primary studied dialect). The NAA scores for those who studied LA are significantly higher than the scores of those who studied EA or GA. This difference may be an indication of transferability of dialects (see section 4.5) or overall proficiency of LA participants (LA scores for those who were familiar with LA were slightly higher than other categories; see Table 1). It could also be related to overall lower MSA focus of LA learners (see Table 9).

Table 8. NAA scores by primary dialect studied

	Mean of NAA Score	Std. Dev	Std. Error of Mean	Min	Max	Range
EA (N=6)	**11.33**	5.46	2.23	8	22	14
LA (N=21)	**21.95**	10.99	2.40	8	50	42
GA (N=6)	**13.00**	4.86	1.98	6	20	14
(Scale for mean scores is 0-100)						

4.3.2   Average MSA focus by region

Table 9 shows means of the 4-semester average MSA focus (percent) of the same group of participants represented in Table 8 (those who studied full-time for four semesters). Participants who studied EA and GA full-time focused on MSA significantly more (over the course of four semesters) than participants who studied LA full-time. This distinction is likely because a large number of the LA participants studied at a language program in Jordan that places a strong emphasis on CA. Because the sample sizes of EA and GA participants are smaller, they may not be representative of how Arabic programs in those countries function.

Table 9. Average MSA focus by primary dialect studied

	Mean of MSA focus	Std. Dev	Std. Error of Mean	Min	Max	Range
EA (N=6)	**41.50**	19.90	8.12	17	75	58
LA (N=21)	**26.74**	20.55	4.49	0	64	64
GA (N=6)	**41.04**	17.44	7.12	8	58	50
(Scale for mean scores is 0-100)						

4.3.3 *Individual t-test: Comparison of unrelated dialect scores for MSA/CA focus by semester*

Table 10 and Figure 2 show the results of the Individual T-Test (comparison of means) of NAA scores by MSA focus. Results were split into two groups based on the median of MSA focus for each semester. The group that placed less focus on MSA (for example, in Semester 1, 0-20%) is labeled as low MSA focus. Since the amount of MSA focus for each semester of study is slightly different, cutoff points for each group are slightly different.

All tests showed strong statistical significance except the test for Semester 2 (p=.081), which was only marginally significant. In each case, participants who placed a greater focus on CA were better able to understand NAA than participants who focused on MSA. The most significant difference in means was found in Semester 1 focus on MSA (see Table 11 for a presentation of Semester 1 significance). Figure 2 shows the mean scores for each semester as well as the standard error bars.

Table 10. Comparison of less-related dialect scores for MSA/CA focus by semester

Semester 1									
Mean of MSA focus=24%, Median of MSA focus=20%									
MSA focus	**% MSA focus**	**N**	**Mean**	**Min**	**Max**	**SD**	**Std Error**	**Mean Dif**	**Sig**
Low	0-20%	19	22.53	8	50	10.71	2.46	9.74	.003**
High	21-100%	14	12.79	6	33	6.77	1.81		
Semester 2									
Mean of MSA focus=27%, Median of MSA focus=20%									
MSA focus	**% MSA focus**	**N**	**Mean**	**Min**	**Max**	**SD**	**Std Error**	**Mean Dif**	**Sig**
Low	0-20%	17	21.41	8	50	11.70	2.84	6.22	.081*
High	21-100%	16	15.19	6	33	7.81	1.95		
Semester 3									
Mean of MSA focus=39%, Median of MSA focus=40%									
MSA focus	**% MSA focus**	**N**	**Mean**	**Min**	**Max**	**SD**	**Std Error**	**Mean Dif**	**Sig**
Low	0-40%	18	22.11	8	50	10.81	2.55	8.18	.018**
High	41-100%	15	13.93	6	33	7.97	2.06		
Semester 4									
Mean of MSA focus=39%, Median of MSA focus=40%									
MSA focus	**% MSA focus**	**N**	**Mean**	**Min**	**Max**	**SD**	**Std Error**	**Mean Dif**	**Sig**
Low	0-40%	21	21.24	8	50	10.82	2.36	7.82	.021**
High	41-100%	12	13.42	6	33	7.50	2.16		
Average of 4 Semesters									
Mean of MSA focus=34%, Median of MSA focus=35%									
MSA focus	**% MSA focus**	**N**	**Mean**	**Min**	**Max**	**SD**	**Std Error**	**Mean Dif**	**Sig**
Low	0-35%	17	23.29	8	50	10.88	2.64	10.11	.003**
High	36-100%	16	13.19	6	33	6.77	1.69		
Reported "Overall" Focus									
Mean of MSA focus=33%, Median of MSA focus=35%									
MSA focus	**% MSA focus**	**N**	**Mean**	**Min**	**Max**	**SD**	**Std Error**	**Mean Dif**	**Sig**
Low	0-35%	17	22.00	8	50	11.53	2.80	7.44	.036**
High	36-100%	16	14.56	6	33	7.48	1.87		
*(Scale for mean scores is 0-100). * indicates $p<0.10$ (marginal significance) ** indicates $p<0.05$*									
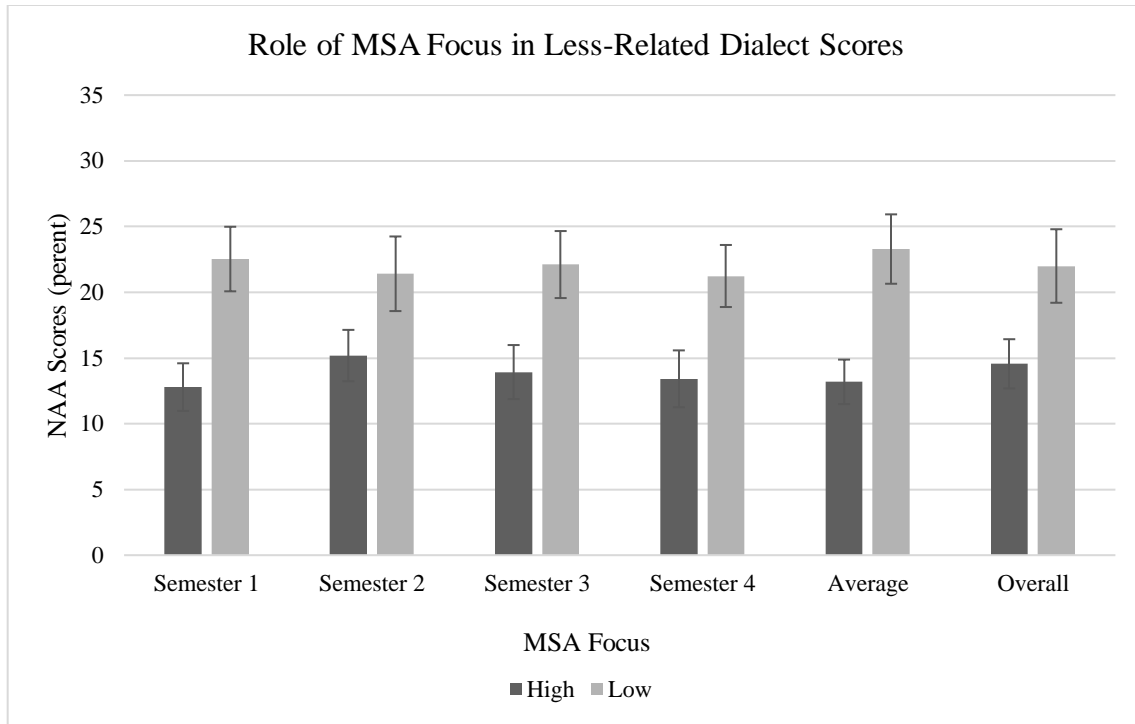
Figure 2. Comparison of Less-Related Dialect Scores for MSA focus by semester

4.3.4 First semester study

This analysis seeks to answer the question, "What role does MSA focus *in the first semester* play in a learner's ability to understand a less-dialect of Arabic?"

Table 11 and Figure 3 show NAA scores for four different groups of learners of EA, LA, and GA who were unfamiliar with NAA. These groups only include learners who studied full-time; part-time learners are not included in this analysis.

- Group 1: Studied 1+ semesters (N=67)

- Group 2: Studied 2+ semesters (N=58)

- Group 3: Studied 3+ semesters (N=51)

- Group 4: Studied 4 semesters (N=33)

This analysis allows for the inclusion of the maximum number of observations. The MSA focus percentages for each group are for Semester 1 only, not the average each semester. The

analysis shows that the significant role of Semester 1 MSA focus is not limited to those studied

for four semesters. MSA focus is marginally significant (p=.052) for those who studied 3+

semesters and strongly significant for those who studied 2+ semesters (p=.026) and 4+ semesters

(p=.003) For every case, those who reported low focus on MSA in Semester 1 had higher scores

on NAA than those who reported high focus on MSA.

Table 11. Role of Semester 1 MSA focus by groups who studied 1-4 semesters

MSA focus	% MSA focus	N	Mean	Min	Max	SD	Std Error	Mean Dif	Sig
Group 1: Studied 1+ Semesters (N=67)									
Mean of MSA focus=27%, Median of MSA focus=25%									
Low	0-24%	33	19.33	0	50	10.67	1.86	4.07	.119
High	25-100%	34	15.26	4	60	10.43	1.79		
Group 2: Studied 2+ Semesters (N=58)									
Mean of MSA focus=28%, Median of MSA focus=23%									
Low	0-23%	29	20.21	0	50	11.09	2.06	5.55	.026**
High	24-100%	29	14.66	6	33	6.92	1.29		
Group 3: Studied 3+ Semesters (N=51)									
Mean of MSA focus=25%, Median of MSA focus=20%									
Low	0-20%	28	20.50	0	50	11.18	2.11	5.41	.052*
High	21-100%	23	15.09	6	33	7.39	1.54		
Group 4: Studied 4 Semesters (N=33)									
Mean of MSA focus=24%, Median of MSA focus=20%									
Low	0-20%	19	22.53	8	50	10.71	2.46	9.74	.003**
High	21-100%	14	12.79	6	33	6.77	1.81		
(Scale for mean scores is 0-100). * indicates p<0.10 (marginal significance) ** indicates p<0.05									
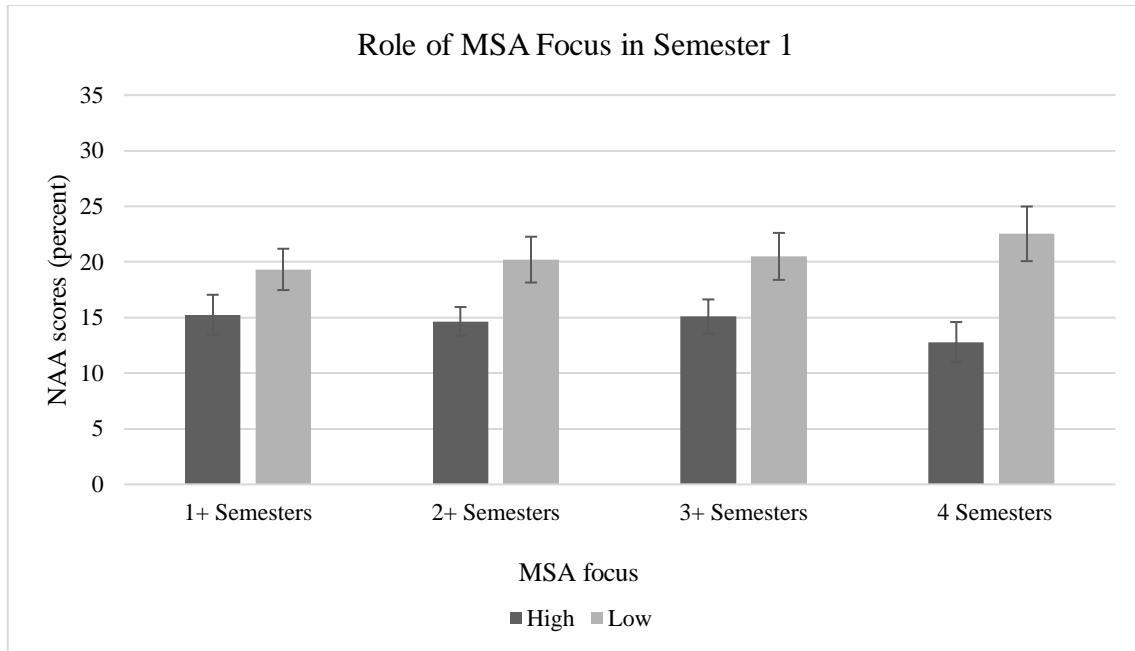
Figure 3. Role of Semester 1 MSA focus by groups who studied 1-4 semesters

4.4 Multi-Dialect Comprehension Analysis

In addition to looking at a learner's understanding ability in specific dialects of Arabic, this study considers two other measures that may indicate a learner's ability to transfer. The first is the learner's ability in the primary dialect they studied (Primary Dialect Understanding) and the second is his or her overall ability to understand different dialects of Arabic (Multiple Dialect Understanding) which was calculated as the average of all four test scores.

4.4.1 Primary studied

Table 12 and Figure 4 show Primary Studied Dialect scores for learners of all dialects who studied for four semesters (N=40). This analysis seeks to answer the question, "What role does MSA focus play in a learner's ability to understand a *studied dialect* of Arabic when the learner has studied for four semesters?" While it seems intuitive that learners who had low focus on MSA (and high focus on CA) will have a stronger ability to understand the primary dialect they

studied than those who reported high focus on MSA, the inclusion of this data fulfills two purposes. First, it confirms the reliability of the instrument by showing expected correlations. Second, Trentman (2011) showed that the listening score in a familiar dialect was a strong predictor of scores in an unfamiliar dialect, so anything that contributes to the score of the primary dialect studied also indirectly contributes to understanding ability in other dialects. Focus on MSA in Semester 4 and Overall MSA focus show strong statistical significance, which may indicate that the impact of MSA focus grows over time. The average focus on MSA over all four semesters is marginally significant. In every case, those who focused less on MSA had higher scores in the dialects they had studied than those who focused more on MSA.

Table 12. Role of MSA focus in primary dialect understanding

Semester 1								
Mean of MSA focus=23%, Median of MSA focus=20%								
MSA focus	**% MSA focus**	**N**	**Mean**	**Min**	**Max**	**SD**	**Std Error**	**Mean Dif**	**Sig**
Low	0-19%	19	64.63	16	94	21.40	4.91	11.11	.116
High	20-100%	21	53.52	14	94	22.18	4.84		
Semester 2								
Mean of MSA focus=28%, Median of MSA focus=16%								
MSA focus	**% MSA focus**	**N**	**Mean**	**Min**	**Max**	**SD**	**Std Error**	**Mean Dif**	**Sig**
Low	0-16%	20	61.85	16	94	21.77	4.87	6.10	.393
High	17-100%	20	55.75	14	94	22.86	5.11		
Semester 3								
Mean of MSA focus=40%, Median of MSA focus=45%								
MSA focus	**% MSA focus**	**N**	**Mean**	**Min**	**Max**	**SD**	**Std Error**	**Mean Dif**	**Sig**
Low	0-45%	16	62.15	16	94	24.90	5.57	6.70	.248
High	46-100%	24	55.45	14	89	19.31	4.32		
Semester 4								
Mean of MSA focus=42%, Median of MSA focus=41%								
MSA focus	**% MSA focus**	**N**	**Mean**	**Min**	**Max**	**SD**	**Std Error**	**Mean Dif**	**Sig**
Low	0-40%	16	64.67	16	94	23.19	4.73	14.67	.039**
High	41-100%	24	50.00	14	84	18.02	4.51		
Average of 4 Semesters								
Mean of MSA focus=33%, Median of MSA focus=36%								
MSA focus	**% MSA focus**	**N**	**Mean**	**Min**	**Max**	**SD**	**Std Error**	**Mean Dif**	**Sig**
Low	0-35%	20	65.45	16	94	24.01	5.37	13.30	.058*
High	36-100%	20	52.15	14	89	18.62	4.16		
Reported "Overall" Focus								
Mean of MSA focus=34%, Median of MSA focus=40%								
MSA focus	**% MSA focus**	**N**	**Mean**	**Min**	**Max**	**SD**	**Std Error**	**Mean Dif**	**Sig**
Low	0-39%	19	66.47	16	94	23.06	5.29	14.62	.036**
High	40-100%	21	51.86	14	86	19.51	4.26		
*(Scale for mean scores is 0-100). * indicates $p<0.10$ (marginal significance) ** indicates $p<0.05$*								
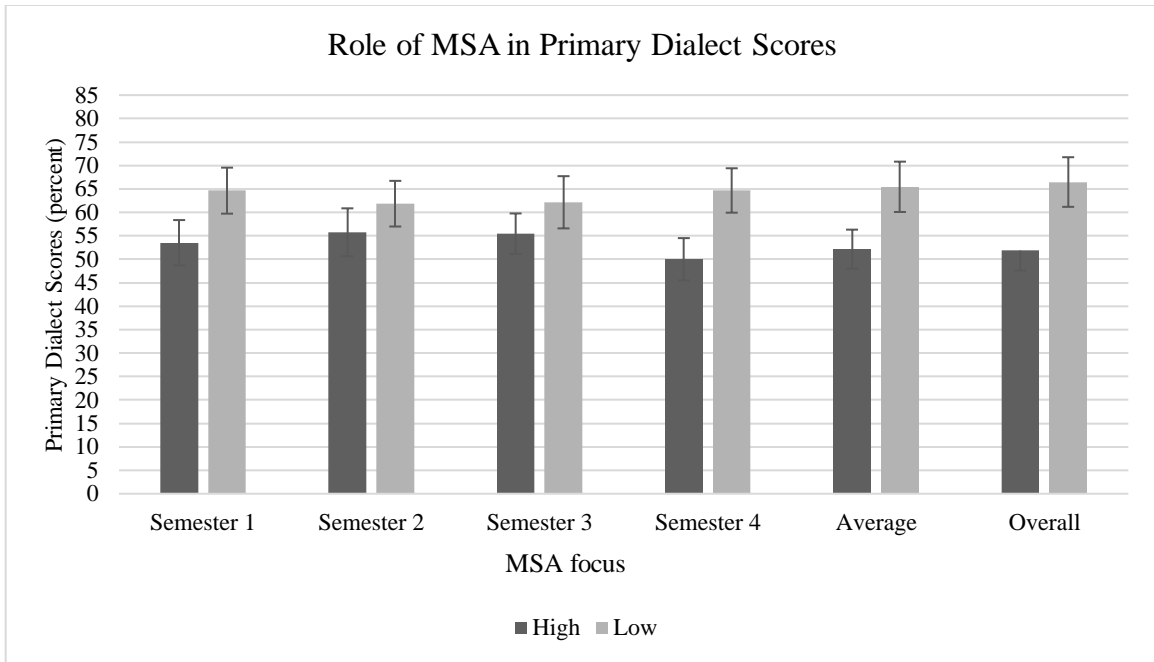
Figure 4. Role of MSA focus in primary dialect understanding

4.4.2 *Multiple dialect understanding*

This analysis seeks to answer the question, "What role does MSA focus play in a learner's ability to understand *multiple dialects* of Arabic when the learner has studied for at least four semesters?" Table 13 and Figure 5 show Multiple Dialect scores for learners of all dialects who studied for four semesters (N=40). The Multiple Dialect score is calculated as the average of all four dialect test scores, representing a participant's average understanding of all tested dialects. MSA focus in Semester 4, the average of four semesters, and overall MSA focus all show statistical significance. In every case, mean scores for learners who had a low focus on MSA were better than those who had a high focus on MSA.

Table 13. Role of MSA focus in multiple dialect understanding

Semester 1									
Mean of MSA focus=23%, Median of MSA focus=20%									
MSA focus	**% MSA focus**	**N**	**Mean**	**Min**	**Max**	**SD**	**Std Error**	**Mean Dif**	**Sig**
Low	0-19%	19	45.50	14	72	17.12	3.93	7.45	.174
High	20-100%	21	38.05	11	68	17.72	3.65		
Semester 2									
Mean of MSA focus=28%, Median of MSA focus=16%									
MSA focus	**% MSA focus**	**N**	**Mean**	**Min**	**Max**	**SD**	**Std Error**	**Mean Dif**	**Sig**
Low	0-16%	20	43.79	11	69	16.85	3.77	4.40	.423
High	17-100%	20	39.39	12	72	17.53	3.92		
Semester 3									
Mean of MSA focus=40%, Median of MSA focus=45%									
MSA focus	**% MSA focus**	**N**	**Mean**	**Min**	**Max**	**SD**	**Std Error**	**Mean Dif**	**Sig**
Low	0-45%	16	45.21	11	72	18.83	4.21	7.25	.184
High	46-100%	24	37.96	12	69	14.80	3.31		
Semester 4									
Mean of MSA focus=42%, Median of MSA focus=41%									
MSA focus	**% MSA focus**	**N**	**Mean**	**Min**	**Max**	**SD**	**Std Error**	**Mean Dif**	**Sig**
Low	0-40%	16	47.21	11	72	17.79	3.63	14.05	.009**
High	41-100%	24	33.16	12	53	12.24	3.06		
Average of 4 Semesters									
Mean of MSA focus=33%, Median of MSA focus=36%									
MSA focus	**% MSA focus**	**N**	**Mean**	**Min**	**Max**	**SD**	**Std Error**	**Mean Dif**	**Sig**
Low	0-35%	20	48.16	11	72	18.55	4.15	13.15	.013**
High	36-100%	20	35.01	12	62	12.88	2.88		
Reported "Overall" Focus									
Mean of MSA focus=34%, Median of MSA focus=40%									
MSA focus	**% MSA focus**	**N**	**Mean**	**Min**	**Max**	**SD**	**Std Error**	**Mean Dif**	**Sig**
Low	0-39%	19	47.51	11	72	17.61	4.04	11.29	.035**
High	40-100%	21	36.23	12	69	15.12	3.30		
*(Scale for mean scores is 0-100). * indicates $p<0.10$ (marginal significance) ** indicates $p<0.05$*									

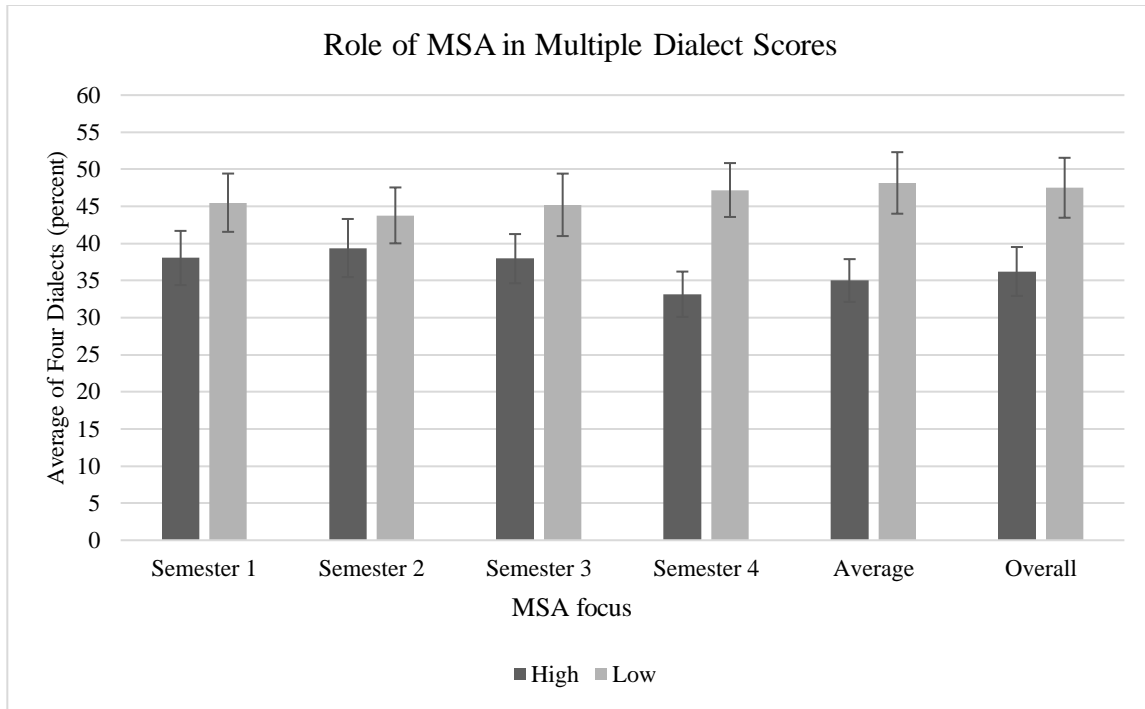Figure 5. Role of MSA focus in multiple dialect understanding

4.5 Dialect Transferability Analysis

Table 14 shows the relationship between scores for each dialect while controlling for the following independent variables: score of primary dialect studied, months lived in the Arab World, and whether or not the target dialect was familiar. Table 14 shows a summary of the relationships between the same variables.

Exposure to the dialect was a binary variable, with participants categorized as either "exposure" or "no exposure" based on questionnaire answers. Those who were exposed to the dialect had significantly better scores on that dialect, regardless of the dialect they studied. A learner's score in the primary dialect he or she studied was a very significant predictor for other dialect scores in each case. Months lived in the Arab World was a significant predictor of NAA scores and GA scores. Controlling for these three variables allows the other independent

variables (test scores) to point to linguistic ability between learners of various dialects, rather than other non-linguistic factors (such as time and experience in the culture).

Table 14. Multiple regression analysis

Independent variables	Dependent variables											
	NAA Score			EA Score			LA Score			GA Score		
	Std Coef	Std Err	Sig	Std Coef	Std Err	Sig	Std. Coef	Std Err	Sig	Std Coef	Std Err	Sig
NAA Score				-.025	.094	.677	-.038	.106	.441	-.093	.094	.036**
EA Score	-.285	.085	.033**				.115	.097	.102	.033	.089	.600
LA Score	-.034	.085	.851	.382	.085	.002**				.283	.081	.001**
GA Score	-.200	.086	.286	-.026	.084	.826	.234	.094	.016**			
Months in the AW	.208	.014	.022**	.094	.014	.110	-.029	.016	.552	.131	.014	.002**
Score in primary studied	.884	.103	.000**	.437	.104	.002**	.437	.529	.000**	.572	.101	.000**
Exposure to the dialect	.363	2.356	.000**	.333	2.216	.000**	.192	2.613	.000**	.224	2.007	.000**

*** indicates* p<0.05

Table 15. Summary of multiple regression relationships

		Dependent Variable			
		NAA	EA	LA	GA
Independent variables	**NAA score**		-	-	--
	EA score	--		+	+
	LA score	-	++		++
	GA score	-	-	++	
	Months in Arab World	++	+	-	++
	Score of primary studied	++	++	++	++
	Exposure to the dialect	++	++	++	++

- indicates a relationship that is negative but not statistically significant
+ indicates a relationship that is positive but not statistically significant
-- indicates a relationship that is negative and is statistically significant
++ indicates a relationship that is positive and is statistically significant

CHAPTER 5

DISCUSSION

5.1   Relationship Between MSA Focus and Unfamiliar Dialect Understanding

5.1.1   Discussion

Research Question 1: What is the relationship between a learner's focus on MSA and his or her ability to understand an unfamiliar dialect of Arabic?

Results of this study show that there is a relationship between a learner's focus on MSA and his or her ability to understand unfamiliar dialects of Arabic. This relationship is shown in the first three analyses, which will be discussed below.

First, as shown in the Related Dialects Transfer analysis, there is a weak negative relationship between high focus on MSA and a learner's ability to understand a related dialect of Arabic, though in most cases within this analysis, the difference in means between those who focused more on MSA and those who focused less on MSA was not statistically significant. For learners of eastern dialects (EA, LA, and GA), focus on MSA did not significantly impact their scores in unfamiliar dialects when the unfamiliar dialect was another eastern dialect. Not only are these three dialects are related to each other, but they are also more closely related to MSA than NAA is. Therefore, though participants with a high focus on MSA had slightly lower scores than those who focused less on MSA, the impact was not significant.

Second, as shown in the Less-Related Dialects Transfer analysis, there is a strong negative relationship between high focus on MSA and a learner's ability to understand a less-related dialect of Arabic. For participants who studied eastern dialects (for whom NAA was unfamiliar), the mean NAA scores of those with a high focus on MSA were significantly lower than mean

scores of those with a low focus on MSA. This finding is likely related to lexical, phonological, and grammatical features that dialects of CA have in common that are not shared with MSA (Ferguson, 1959b). This analysis also looked at the impact of MSA focus in Semester 1 for four different groups of learners who were unfamiliar with NAA and found that, regardless of how long a participant has studied an eastern dialect, lower focus on MSA in Semester 1 is positively related to his or her ability to understand NAA.

Third, the Multi-Dialect Comprehension analysis looks at two other scores that are associated with a learner's ability to understand unfamiliar dialects—primary dialect understanding (score of the primary dialect studied) and multiple dialect understanding (mean of all four dialect test scores). High MSA focus in both Semester 4 and Overall appear to have a statistically significant negative impact on these scores. These analyses all address Research Question 1 regarding the relationship between MSA focus and unfamiliar dialect understanding ability: for each statistically significant case of these three analyses, mean scores of those who had high focus on MSA were lower than who had low focus on MSA.

Each of these analyses show distinctive factors about MSA focus in different semesters. Lower focus on MSA in Semester 1 showed statistical significance in transfer to a less-related dialect and marginal significance in transfer to related dialects. When it comes to understanding a dialect that is very different from the one the learner has studied, those who focus more on MSA probably spend less time in intensive listening, a skill that is usually taught when focusing on CA. Therefore, this listening skill may be what allowed participants with lower MSA focus (higher CA focus) to comprehend particular words or phrases that those with high MSA focus did not understand.

In contrast, Semester 1 MSA focus does not appear to have a significant impact on the score of the primary dialect studied or multiple dialect scores (average of all four test scores). One possible explanation for this phenomenon is that the type of MSA study that might be in Semester 1 would not necessarily negatively affect the learner's ability in the studied variety of CA or multiple-dialect understanding. For example, Semester 1 MSA focus may involve learning to read and write which are skills that may not negatively impact acquisition of CA in a significant way.

Focus on MSA in Semesters 2 and 3 is statistically significant only in the transfer to a less-related dialect. Semester 4 MSA focus, though, is statistically significant for transfer to less-related dialects as well as in scores of the primary dialect studied and multiple-dialect understanding. It is possible that this relationship is particularly strong because the type of MSA instruction that might be presented in Semester 4 is less-related to the colloquial variety that learners studied, so high MSA focus was more hurtful to the learner's CA ability.

My first hypothesis for Research Question 1 (H_{1a}) was that learners who had a high focus on MSA early in learning would have a lower comprehension ability in an unfamiliar dialect than those who had a low focus on MSA early in learning. The results of this research confirm this hypothesis. The Less-Related Dialect Transfer Analysis shows that the most significant difference in means of scores was in Semesters 1 and 4, suggesting that MSA focus may be especially important in these semesters, as discussed above. The Multi-Dialect Comprehension Analysis confirmed the second hypothesis (H_{1b}), showing that for both the primary dialect studied and the average of all four dialects, learners with high MSA focus in both Semester 4 and Overall had significantly lower scores than those with low focus on MSA.

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Results of this study agree with and expand on Trentman's work (2011). Trentman's analyses consisted of transfer between EA and LA (when one was unfamiliar) and transfer between either EA or LA and another unfamiliar dialect. For the unfamiliar dialect transfer, Trentman stated that when she recorded speech samples for the assessment, native speakers of various dialects accommodated toward her as a proficient L2 speaker of MSA, so her analysis specifically looked at learner's comprehension ability when the speaker was accommodating towards MSA. Trentman found that, in the case of transfer between EA and LA, familiar dialect ability was a better predictor of unfamiliar dialect score than MSA listening ability. In the case that included MSA accommodation, she found that both MSA scores and familiar dialect scores were predictors of unfamiliar dialect scores, though MSA ability was a slightly stronger predictor (due to the accommodation). The present study looked at transfer between EA, LA, GA, and NAA and the learner's focus on MSA throughout the course of study. Because this study used audio from media made for native speakers, accommodation was not an issue.

As discussed in Chapter 2, previous research has shown that there may be advantages to focusing on CA early in an Arabic learner's experience. Ibrahim (2009) showed through a study of Palestinian Arabic students (who were native speakers of CA) that learning MSA is similar in process to learning a second language, so expecting non-native speakers to learn both CA and MSA at the same time would be taxing. This concept is likely one reason why learners in this study who focused on MSA scored lower in both familiar and unfamiliar dialects. Haddad (2006) argued that learners who study MSA first construct a non-native-like mental phonology that is difficult to adjust when learning CA later. Qafisheh (1974) and Dona-Schmidt, Inbar & Shohany (2004) discuss the issue of MSA focus as it relates to learner motivation. While this study does

not directly confirm the findings of these other researchers, it highlights another aspect of why learners should focus on CA before learning MSA—to facilitate transfer to a second dialect.

Results of this study also confirm Al-Batal's proposal that CA and MSA should be integrated in the classroom (2018), and MSA should not be taught without the addition of a colloquial variety. However, Al-Batal's framework is applied primarily to non-immersion environments (such as American universities) and assumes that MSA is the basis of the curriculum. Participants in this study, on the contrary, learned Arabic in a study-abroad (immersion) context. Most of the language programs represented have a high focus on a local variety of CA. Rather than asking the question "Which dialect of Arabic should we integrate?," programs and learners are asking, "How much should we focus on CA and how much on MSA?" Therefore, the implications of this study may be limited to programs that are in the Arab World, where a particular dialect of CA is readily available for study.

This study has several limitations. The sample size for each analysis is relatively small, and the number of observations from the Levant is significantly higher than from other regions. The sample size from North Africa is much smaller than the other regions, and only includes one participant who studied for four semesters. A larger sample of participants who studied NAA may have shown that high focus on MSA positively impacted understanding of eastern dialects, but the limited sample size did not allow for this analysis.

The sample also included a very wide range of experience and proficiency, introducing variables that cannot be controlled for in each analysis—though this issue was addressed by using a sub-section of the data (those who had studied for four semesters) for three of the analyses. In addition, the sample size allowed only for comparison of means rather than correlations or regression, so a participant's focus on MSA is not necessarily a predictor of how

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they will understand an unfamiliar dialect. Finally, this study measures only comprehension, not overall language proficiency. While comprehension is a significant factor in a learner's ability in a new dialect, it is not the only important factor.

5.1.2 *Implications in light of the theoretical framework*

Sociocultural approaches propose that the best way for learners to develop language ability is to grow into a Community of Practice (COP), as discussed in section 2.1.2. Language learning is a social process, not just the acquisition of linguistic information. Growth happens as an expert and novice interact in the ZPD. Rather than meaning being fixed, SCT argues that meaning and understanding are created and shared by members of the COP and mediated by the symbolic artifacts of that group's words.

As learners of Arabic are faced with the challenge of diglossia, socially informed approaches would suggest that learners should first focus on depth in a dialect of CA before attempting proficiency in MSA. Regardless of the country, CA is the primary language of the community. For learners to become legitimate participants in the COP, they need to interact in the language of the group. As they grow and develop in their CA ability, the natural progression of learning would include learning to read and write (an MSA skill) in the same way that native speakers do—after a significant foundation in CA has been laid. Over-emphasis on MSA in early learning will be outside of the learner's ZPD and will cause frustration rather than optimal growth.

When learners enter into a new dialect community, they begin the process of growth into that COP from the beginning. Their ease of use of the tools that they have from their first dialect learning experience may determine how easily they grow into the new community. Learners who have developed a strong comprehension ability will have a stronger understanding of the

discourses occurring within the community and will be more able to negotiate meaning for speech they do not yet understand. Considering that meaning is not fixed, but rather shared between members of the community, learners must be able to face the challenge of adopting and understanding new meanings of similar words between dialects.

In light of sociocultural approaches to SLA, Arabic language programs should facilitate activities that will lead to learners' growth in the community. This does not mean that programs should omit MSA instruction. On the contrary, MSA ability (at least to a certain extent) is an important part of most Arabic COPs. However, programs should seek to follow a similar progression that community members experienced: initial growth in CA, followed by MSA learning through proper means (reading, writing, and media). Suitable timing of MSA instruction (*after* learners already have a strong foundation in CA) will increase their ability to fully participate in the COP as they acquire sociolinguistically appropriate usage of the full spectrum of Arabic.

5.1.3 Implications and recommendations for language programs

Considering that 81% of participants in this study expressed that they either already have learned or plan to learn another dialect of Arabic, this study has various implications for language programs. Arabic programs need to consider how they can best prepare learners for multi-dialect understanding. The Less-Related Transfer section shows that the amount of emphasis placed on MSA in Semester 1 is especially significant for learners' long-term ability to understand unfamiliar dialects. The Multi-Dialect Comprehension section shows that learners' focus on MSA also influences their ability to understand the primary dialect they studied, which is of high importance to language programs.

Another important number for language programs to understand is the median MSA focus. For semesters one and two, learners who placed less than 20% focus on MSA (80% or more focus on CA) did better on several tests. If language programs followed this number, MSA instruction for the first two semesters would likely be limited to the basics of reading and writing, which can be learned in the context of CA texts (such as text messages, social media posts, advertisements, and other learning material written in CA). For semesters three and four, learners who placed less than 40% focus on MSA (60% or more focus on CA) did better on the tests. For language programs, this type of MSA focus might include the introduction of simple reading materials in MSA (such as children's books) and some oral materials (such as formal talks on the radio), while still discussing in and teaching in CA.

This study does not suggest that language programs should be CA-only for the duration of the program. Rather, because the line between CA and MSA is blurred (see Chapter 2 for a thorough discussion of Arabic diglossia), programs should approach MSA in natural environments (such as written texts and formal oral speech) in the context of CA learning at appropriate timing, not rushing to introduce MSA before students' ability in CA can support it.

5.1.4 *Implications and recommendations for learners*

Learners do not always have the prerogative to determine their program of study. Some may be mandated by their employer or university to study at a particular school. However, to the degree that learners have an option, they should consider which programs place a strong emphasis on CA throughout the course of study. And, regardless of program choice, learners can still take responsibility for their learning by focusing self-study on CA through listening to recorded auditory input, spending time with native speakers, and placing a personal emphasis on

CA. Similar to language programs, learners should aim to focus at least 80% of their effort on CA in the first two semesters and at least 60% in their next two semesters.

Though learners may not know which dialect they will ultimately need most, since ability in one dialect is a good predictor of ability in unfamiliar dialects (Trentman, 2011), learners should work hard to go as far as they can in one dialect rather learn Formal Standard Arabic (*see* the discussion of Ryding in section 2.3.2). At the same time, anecdotal evidence suggests that having exposure to multiple dialects is not a detriment to learning, especially in later stages of learning. So, learners should focus on one dialect of CA, but not be shy about interaction with native speakers of Arabic from all different backgrounds. Exposure to other dialects will help the learner build a stronger multi-dialect ability that will serve them wherever they are in the Arab World.

5.2   Dialect Transferability

5.2.1   Discussion

Research Question 2: Which dialect of Colloquial Arabic best prepares learners to understand unfamiliar dialects?

Results of the Dialect Transferability analysis confirm the hypothesis (H_{2b}) that ability in LA positively predicts ability in other eastern dialects. In addition, though the correlation between LA scores and NAA scores is not significant (and is, in fact, negative), it is less negative than the correlation between NAA and GA or EA. However, this analysis only partially confirms hypotheses about EA (H_{2a}) and GA (H_{2c}). GA positively predicts LA scores, but no other relationship between EA and GA and other eastern dialects was significant. This may be due to

the smaller sample of participants who primarily studied EA or GA. Finally, as predicted (H_{2d}), NAA scores were not a significant predictor of other dialect scores.

Trentman's research showed empirically what Al-Batal & Belnap (2006) proposed—that the transfer between Egyptian and Levantine Arabic should be relatively easy for L2 learners. She showed that a learner's ability in EA would assist him or her in understanding LA, and vice versa. This study confirmed the relationship between learners of LA and understanding ability in EA. However, it did not show a significant correlation in the other direction (EA scores were not a significant predictor of LA scores). The lack of significance is likely a result of limited data. Nevertheless, the number of participants who studied LA is much higher than the number of participants who studied other dialects, and the scores of those who studied LA were generally higher than the scores of those who studied other dialects. Therefore, the distribution of dialects is a limitation in this study.

In addition to showing which dialects best facilitate transfer to other dialects, this analysis shows that comprehension ability in one dialect is a strong predictor of comprehension ability in another dialect. This is in agreement with Trentman's (2011) research, which showed that for listening comprehension, familiar dialect ability was a better predictor of unfamiliar dialect scores than MSA ability. The analysis also showed that months lived in the Arab World was a significant predictor of test scores in NAA and GA. Though it was not significant in EA or LA, it is notable that the relationship between months in the Arab World and scores in LA was actually negative, not positive. These varied results may show that while living in an immersion environment can help with language learning, length of time in that environment does not necessarily predict language ability.

5.2.2 *Implications in light of the theoretical framework*

Sociocultural approaches look at each dialect community as a distinct COP that uses different cultural artifacts (including words) to mediate understanding. The artifacts used in one country are not the same as those of another country. Shared meaning, because it is constructed by community members, is different from one place to another. This means that learners are not choosing a particular dialect to study—they are choosing a COP in which to learn to participate. Learners should not expect that reaching full participation in one dialect COP will automatically result in immediate full participation in a new dialect community. Instead, a learner should approach a new COP as a novice, relying on the experts (native speakers) to interact with them in a way that will help them learn how to be full members of that community. Full participation will mean developing similar inter-dialect skills that members of that community practice when talking with Arabic speakers from other countries.

Ultimately, a learner's ability to understand one or more dialects will determine his or her initial participation in a new COP. This study shows that learners of LA had a stronger ability to understand related dialects, which would indicate an easier transition into new COPs. On the other hand, it may indicate that learners who have a stronger ability to understand may be less willing to take the novice position and learn from experts in the new COP. In the case of learners of LA who already have a strong understanding in a new dialect (and are thus not motivated to learn), they may always be considered a "Levantine" member of the community rather than adapting their understanding and speech to the shared meanings of the new COP. While the most practical dialect for learners to study may appear to be LA, robust understanding of an unfamiliar dialect will require intentional work to participate fully in the new COP.

5.2.3   Implications and recommendations for language programs

This study focused on Arabic programs in the Arab World. The natural (and best) dialect option for these programs is the dialect of the community in which the programs function. Programs in Egypt, for example, should not focus on teaching Levantine Arabic for the sake of transferability. Rather, programs should expose learners to a variety of speakers and ways of speaking within Egyptian Arabic in order to develop listening comprehension skills within one dialect. Programs in countries with large Arab immigrant populations may consider offering additional dialects if learners are working with and living among a non-majority population. For example, a language school in Cairo may consider offering a Syrian track for those whose primary purpose is to work with Syrian refugees. For language programs that are outside of the Arab World, this study confirms Trentman's (2011) and Al Batal & Belnap's (2006) hypotheses that Levantine Arabic is a good dialect to integrate into the MSA classroom.

5.2.4   Implications and recommendations for learners

Ideally, learners studying abroad will have the opportunity to study the dialect they will work in long-term. However, due to the political climate in the Middle East and lack of language programs in some Arab countries, learners may not have open access to their community of interest. This research gives insight into which dialect may be a good second choice for learners who cannot study the dialect they wish to work in long-term. According to these findings, learners who wish to eventually live in the Gulf or Egypt (but cannot) should focus on learning LA, as it will give them the best access to these two dialects. Those who are interested in living in the Levant but cannot should focus on GA, which was the best predictor for Levantine. While there was no significant predictor for NAA, the best of the other three dialect options was

Levantine, which would be the most reasonable choice for those interested working in North Africa.

Wherever learners will end up long-term, the best predictor of comprehension in an unfamiliar dialect is ability in the primary dialect studied. Learners should be less concerned about learning multiple dialects or mastering MSA and more concerned with deep participation in one COP—a type of participation that will allow them to access COPs in a new dialect more easily. If learners are distracted by the fact that they may not always use their current dialect of study, they will neglect the development of the tools that will help them to eventually make a transition.

5.3   Areas for Future Research

Future research could address some of the limitations of this study or expand on different parts of the findings. For example, a larger sample size of advanced learners (those who have studied full-time for at least four semesters) would allow for more conclusive findings regarding which variables increase understanding of an unfamiliar dialect. It would also be helpful to do a qualitative study of participants who performed exceptionally well on the unfamiliar dialect measure. This would give more insight into what learning factors are especially influential in unfamiliar dialect comprehension ability.

Sociolinguistic research could explore Arab perceptions of learners' choice of variety (MSA or CA) in order to help learners and programs make sociolinguistically appropriate learning decisions. Finally, future research should address the inter-dialect strategies that native speakers of Arabic use when communicating with Arabs from other countries. This would shed light on ways that L2 Arabic learners could employ some of the same strategies in inter-dialect communication.

5.4   Conclusion

The challenges of Arabic diglossia and dialect variety are remarkably relevant to learners—but they are certainly not insurmountable obstacles. The space between pure CA and pure MSA provides for rich variety in register that, given time, L2 learners can not only understand and appreciate, but also use appropriately. This study has shown that learners who focus less on MSA and more on CA—especially in the early phases of learning—have a stronger ability to navigate dialect transition than those who place a stronger emphasis on MSA. Approaching diglossia in the way that Arabs approach it may be a helpful strategy for language learners and language programs—first emphasizing communication ability within the community (in CA), then integrating MSA instruction later in learning.

Additionally, this study shows that learners who studied in the Levant understood other dialects better than those who had studied in North Africa, Egypt, or the Gulf, and in each case, the best predictor for transfer to an unfamiliar dialect is ability in a studied dialect. The inter-dialect proficiency that native speakers of Arabic demonstrate may seem like a distant reality for learners, but to the extent that learners are growing as legitimate participants in a community, they will grow in their ability to effectively negotiate meaning with speakers of all dialects of Arabic.

APPENDIX

QUESTIONNAIRE

Notes in italics indicate display logic.

1. Where have you learned Arabic?
    a. In my home country
    b. In the Arab World
    c. I grew up hearing Arabic at home
    d. Other:

If the answer to Question 1 was a*, Question 2 was displayed.*

2. Briefly describe your Arabic learning experience in your home country:

If the answer to Question 1 was c*, Question 3 was displayed.*

3. What dialect of Arabic did you hear growing up?

4. In which regions of the Arab World have you lived? (Select all that apply)
    a. North Africa (includes Morocco, Algeria, Tunisia, Libya)
    b. Egypt
    c. Levant (includes Palestine, Jordan, Lebanon, Syria)
    d. Iraq
    e. Gulf (includes Saudi Arabia, Oman, Bahrain, UAE, Yemen, Qatar)
    f. Other:

5. How many **months** did you live (or have you lived) in North Africa?

6. While in North Africa, which of the following best describes your learning situation? (Note: For this study, full time is considered 15 hours/week in class/sessions)

    a. Did not study Arabic while in North Africa
    b. Full-time Arabic study for less than 6 months
    c. Full-time Arabic study for 6-12 months
    d. Full-time Arabic study for 12-18 months
    e. Full-time Arabic study for 18-24 months
    f. Full-time Arabic study for more than 24 months
    g. Part-time Arabic study

If the answer to Question 6 was g*, Question 7 was displayed.*

7. Which best describes your part-time Arabic study while in North Africa?
    a. Part-time study over a period of time
    b. Intensives (periods of intensive study followed by periods of little or no study)

     c. Other

If the answer to Question 6 was c-f, *Questions 8-10 were displayed:*

8. **Months 1-6**
In months 1-6 of Arabic study in North Africa, approximately what percentage of your **class time** was focused on North African Arabic (Moroccan, Tunisian, etc.) and what percentage was focused on Modern Standard Arabic (MSA)?
    a. North African Arabic : _____
    b. Modern Standard Arabic (MSA) : _____

9. In **months 1-6**, approximately how many hours a week did you spend doing **written** homework?

10. In **months 1-6**, approximately how many hours a week did you spend **communicating in North African Arabic** outside of the classroom?

Questions 8-10 were repeated for months 7-12, 13-18, and 19-24 and displayed based on the participant's answer to Question 6.

11. **Overall**
During your overall time of Arabic study in North Africa, approximately what percentage of your **class time** was focused on North African Arabic (Moroccan, Tunisian, etc.) and what percentage was focused on MSA?
    a. North African Arabic : _____
    b. Modern Standard Arabic (MSA): _____

Questions 5-11 were repeated for each region (Egypt, Levant, Gulf, Iraq) based on the participant's answer to Question 4.

12. What is your experience or expectation regarding multiple dialects of Arabic?
    a. I have already learned/studied more than one dialect
    b. I anticipate that I will learn/study a second dialect
    c. I do not anticipate that I will learn/study a second dialect

13. Please list all Arabic programs you've attended and for how long you attended each.

14. Do you have any additional comments about your language-learning process?

15. At what stage in language learning do you think it's most beneficial to develop skills in Modern Standard Arabic?

a. Before studying a spoken variety
b. Within the first 3 months of study of a spoken variety
c. Within the first year of study of a spoken variety (but not necessarily the first 3 months)
d. After the first year of study of a spoken variety
e. Not beneficial
f. Other:

16. Rate how comfortable **reading** and **understanding** the following types of text (0-100 - not comfortable or no experience, moderately comfortable, very comfortable)
    a. Individual words
    b. Text messages
    c. Children's books
    d. Newspaper
    e. Religious texts
    f. Novel

17. Which variety of Arabic do you know best?
    a. Modern Standard Arabic (MSA)
    b. North African (includes Morocco, Algeria, Tunisia, Libya)
    c. Egyptian
    d. Levantine (includes Palestine, Jordan, Lebanon, Syria)
    e. Iraqi
    f. Gulf (includes Saudi Arabia, Oman, Bahrain, UAE, Yemen, Qatar)
    g. Other:

*Questions 18-19 were **not** displayed if the participant indicated he/she had lived in the region mentioned.*

18. How familiar are you with North African Arabic (includes Morocco, Algeria, Tunisia, Libya)?
    a. Not familiar at all
    b. Slightly familiar
    c. Moderately familiar
    d. Very familiar

19. Which of the following describe your exposure to North Africa Arabic?
    a. No exposure
    b. I have studied North African Arabic
    c. I have visited North Africa
    d. Friends speak to me in North African Arabic
    e. I have watched media in North African Arabic
    f. Other:

Questions 18-19 were repeated for each of the dialects included in the study (Egyptian, Levantine, Gulf).

Optional:

20. If you would like to receive your individual scored results, the final study results, or links to the full audio recordings used in the survey, you may enter your email below.

21. Which results would you like to receive? (Click all that apply) Note: Results and links will be sent after the survey is closed.

      a.   Individual results
      b.   Final study results
      c.   Links to audio clips

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