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Social Networks, Language Acquisition, and Time on Task While Studying Abroad

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While Studying Abroad in Jordan

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ABSTRACT

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This study was designed to collect and evaluate the social networks of 32 study abroad students participating in the 2009 BYU study abroad program in Amman, Jordan. Survey data, language journals, and test scores were analyzed to determine how they successfully built social networks with native speakers, the relationship between students' social networks and time spent using Arabic outside of class, and the relationship between students' social networks and their acquisition of Arabic.

The experiment provided a number of insights into how study abroad students meet potential conversation partners, select which relationships to pursue, and develop relationships in order to build social networks. The study also found that the intensity of students' social relationships as well as the number of clusters in their social networks were predictors of language gains. Additionally, the findings show that social network dispersion and the size of the largest cluster in a network predicted time spent using Arabic outside of class.

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Chapter 1: Introduction

Brigham Young University (BYU) has organized a semester-long, faculty-lead study abroad program in Arabic speaking countries each year since 1959. Participation in this program is one of the requirements of the Middle Eastern Studies / Arabic (MESA) program at BYU. The linguistic objectives of the MESA program state that, students will have advanced-level proficiency in both reading Modern Standard Arabic (MSA), and in speaking "an Arabic dialect" ("BYU Center," 2003). One of the main purposes of the study abroad program is for students to utilize their time there to develop working proficiency in spoken Arabic.

During past years program managers have noticed three distinct problems facing the study abroad students. (1) They report difficulty meeting Arabic speakers to speak with. (2) They avoid using the target language. (3) Some improve while others fail to do so.

Difficulty Making Friends

BYU students are not the only study abroad students to report difficulty making friends (Campbell, 1996; Ferenz, 2005; Isabelli-García, 2006; Lamani, 2008; Polanyi, 1995). The following quotes articulate the difficulty of gaining access to social activities while abroad: "What I really think is that the difficulty I experienced was not so much in conversing, as in gaining access to the social group" (Campbell, 1996, P. 207). "I'd hang around in town— sometimes I would just sit in town and read or something, and there's people around you, but it's not that easy…to meet someone who's French." (Wilkinson, 1998b, p. 33).

One common coping strategy for students struggling to meet native speakers in their country of study is to strengthen their relationships with speakers of their own language (Dewey, 2008; Lamani, 2008; Polanyi, 1995; Whitworth, 2006; Wilkinson, 1998b). Consequently, these students end up using their first language more, as is demonstrated by the following quote: "I

was just so surprised that you could be in France for a month and… really not speak French that often" (Wilkinson, 1998b, p. 33). Students mentioned that being embedded in English speaking social networks aggravated the situation because native speakers seemed too intimidated to approach large groups of foreigners (Whitworth, 2006). However, they report difficulty breaking away from these social networks once they are embedded in them (Krywulak, 1995; Whitworth, 2006) even when they feel frustration for failing to reach their goals and expectations (Lamani, 2008).

Target Language Avoidance

There are multiple possible explanations for students proactively avoiding target language use. Most of them point to the fact that study abroad students are in an environment of increased social anxiety. They have to cope with culture shock and adaptation (Bennett, 1986). Many lack the necessary language skills to engage with native speakers (Brecht & Robinson, 1993). Additionally, they enter a foreign environment where they may encounter cross-cultural misunderstandings or culture-specific gender concerns (Pellegrino-Aveni, 2005; Polanyi, 1995; Schumann, 1976; Whitworth, 2006).

Failure to Gain

As is the case with many previously published studies (Brecht, Davidson, & Ginsberg, 1995; Freed, 1990; Freed, 1995; Yager, 1998), the study abroad experience in general has a positive effect on the language acquisition of BYU students. However, individually they display a spectrum of language improvement. Some students excel and achieve the program's linguistic objectives while others fail to improve or even grow worse in their language skills (Brecht & Robinson, 1993; Isabelli-García, 2006; Polanyi, 1995; Whitworth, 2006). Many return home

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feeling guilt that they did not achieve what they could have (Isabelli-García, 2006; Lamani, 2008).

It is conceivable that failure to make friends with host nationals and avoidance of the target language could play a role in the language gains of BYU students. Those who fail to make friends with host nationals are more likely to build English-speaking social networks and consequently avoid the target language. Additionally, students who are overwhelmed by culture shock, lack of communicative ability in Arabic, or facing cross-cultural misunderstanding may also avoid using the target language. Logically, students in these scenarios would gain less in the target language.

Conclusion

Previous studies indicate that social networks with target language speakers could assist students in overcoming two of these three problems. In 1997, Tanaka, Takai, Kohyama, Fujihara, and Minami found that social networks contributed to the cross-cultural adjustment of international students in Japan. Greater cross-cultural adjustment could result in less target language avoidance. Additionally, multiple studies support the claim that social interaction and social networks coincide with increased language gains. The Georgetown Consortium Project statistically analyzed results from nearly 1300 students from a variety of study abroad language programs. They found that students living in home stays who spent more time with their host family outperformed their counterparts at a statistically significant level (Vande Berg, 2009). Brecht and Robinson found that those who improved the most while studying abroad in Russia spent 40% more time with one Russian friend (1993).

With this in mind, I will examine the social networks of BYU students who studied in Jordan. I will analyze the relationship between those networks and time spent using Arabic

outside of class and language gains while studying abroad. Additionally, I will examine in depth how students successfully build social networks. My research will be guided by the following research questions.

1- How do study abroad students build social networks while on study abroad?

2- What is the relationship between social networks and time on task while on study abroad?

3- What is the relationship between social networks and language acquisition while on study abroad?

Chapter 2: Literature Review

William Labov observed, "The linguistic behavior of individuals cannot be understood without knowledge of the communities they belong to" (2006, p.380). The concept of social networks entered the linguistic realm several decades ago with a study undertaken by Milroy and Milroy (1980). In this study, they discovered, among other things, that the makeup of a speaker's social network played a role in the type of speech that they used in their first language.

Social networks play a role in second language use (Lybeck, 2002) and second language acquisition as well (Dewey, 2008; Fraser, 2002; Lybeck, 2002; Isabelli-García, 2006; Norton & Toohey, 2001; Whitworth, 2006; Wong-Fillmore, 1976). In this chapter, I review literature concerning how second language learners build target language social networks, the relationship of those networks to language acquisition, and the relationship of those networks to time spent using the target language.

Social Network Terms

Before delving into what is known about the topic, it is necessary to explain the key terms and definitions used in social network research (Isabelli-García, 2006; Milroy & Milroy, 1980; Scott, 2000). For the purposes of this study, we will be looking at egocentric networks. That is, examining one person and the people/communities that they interact with. The person at the center of the egocentric social network is referred to as the anchorage. The anchorage in Figure 2.1 is represented by a square.

Zones. Egocentric social networks can be explained in terms of zones. A first order zone is comprised of the people with whom the anchorage has direct contact. In Figure 2.1 A, B, C, D and E make up the first order zone. The second order zone is comprised of people with whom the

anchorage doesn't have direct access, but has indirect access through first order zone. In Figure 2.1 F and G make up the second order zone.
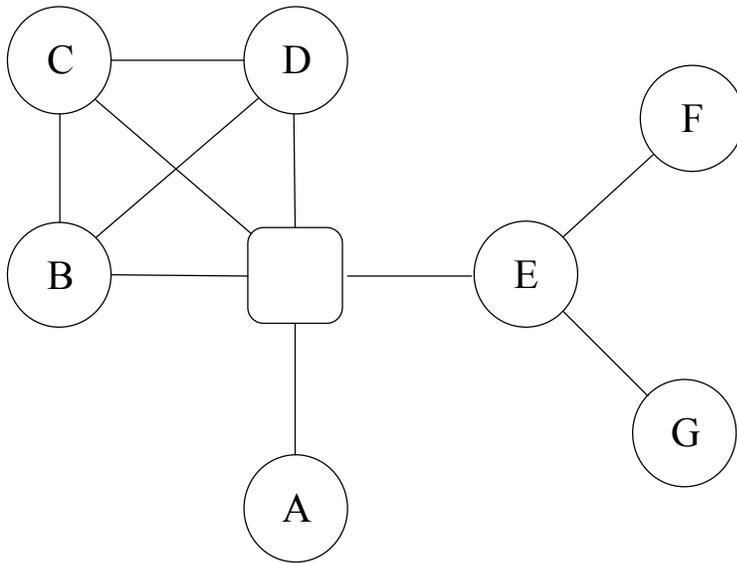
Figure 2.1. Sample Social Network.

The square in the middle represents the anchorage. The lettered circles represent the anchorage's social contacts.

Size. Networks can also be described in terms of size. The size is determined by the number of individuals belonging to a network. The size of the sample network in Figure 2.1 is five.

Density. Networks can also be described in terms of density. In a higher density network, a greater number of the members of the network are interconnected. Many social networks such as the sample network in Figure 2.1 are a mixture of low and high density. The high density areas in social networks are called clusters. The group including B, C, D, and the anchorage in figure 2.1 is an example of a cluster.

Multiplexity. Networks can also be described in terms of multiplex or uniplex ties. Two people are said to have multiplex ties when they associate with one another in more than one context. For example, if E and F from the sample network in Figure 2.1 are neighbors, coworkers, and attend the same church their relationship would be defined as multiplex. Conversely, if they attended the same church but didn't associate with one another outside of church their relationship would be defined as uniplex.

Intensity. Intensity refers to the level of closeness or attachment that members of a network feel toward one another. Different levels of intensity could be described as stranger, acquaintance, friend, and very close friend.

Dispersion. Dispersion refers to how the members of the network are separated into subgroups, or in other words, how they are dispersed. The social network pictured in Figure 2.1 would have a dispersion value of three because the anchorage associates in three distinct group settings. The anchorage and A are the first setting. The anchorage, B, C, and D are the second setting. Finally, the anchorage and E are the third setting.

Social Networks and First Language

The focus of Milroy and Milroy (1980) was the relationship between social networks and language change. They examined three phonological variables in the speech of both Catholic and Protestant residents of Belfast, Ireland. They found that networks higher in density, multiplexity, and intensity are more norm enforcing and inhibit language change. Conversely, networks that are lower in density, multiplexity, and intensity spur language change.

Social Networks and Second Language

While Milroy and Milroy (1980) established the relationship between social networks and first language use, one of the foundational studies demonstrating the relationship between social

networks and second language acquisition was undertaken in 1976 by Wong-Fillmore. She conducted a study that investigated the cognitive issues, social issues, and individual differences of five Spanish-speaking immigrant children learning English in an American elementary school class.

Her analysis revealed that one of the children, Nora, learned English more rapidly and acquired more English than the other children in the study. She concluded that part of the reason that Nora acquired more English could be attributed to the fact that she associated more with English speaking children. She stated that "[Nora] sought [English-speaking children] out to play with to an extent that none of the other children in the study did." (Wong-Fillmore, 1976, p. 706) Nora was almost never observed in the company of other Spanish-speaking or bilingual children. Instead she sought exclusively for the company of English-speaking children. Conversely, Juan, the student who acquired the least English, "avoided English speakers almost altogether… He preferred the company of those with whom he could communicate freely and so he played only with other Spanish speakers or with bilingual children" (Wong-Fillmore, 1976, p. 707). In other words, Nora developed English-speaking social networks while Juan failed to do so.

Building Social Networks

While discussing the social issues of second language acquisition, Wong-Fillmore (1976) explained that in order to gain exposure to the language input needed for acquisition "the learner must somehow establish contact with its speakers" (p. 665). In addition the second language learner must maintain contact and build relationships "so that [members of the L2 community] are willing to provide him with the help he needs" (p. 666). While the differences in age and setting complicate a direct comparison between study abroad students and the child immigrants

in the Wong-Fillmore (1976) study, both groups face similar challenges in terms of becoming integrated into L2 communities.

One method of facilitating social network building is networking within the framework of an existing organization. The elementary school class in Wong-Fillmore's (1976) study would qualify as such an organization. Organized social networks available to study abroad students include host families (Pellegrino, 1997; Vande Berg, 2009; Wilkinson, 1998a; Wilkinson, 1998b; Whitworth, 2006), internships, volunteering, sports teams, musical groups, or university classes (Fraser, 2002; Isabelli-García, 2006; Lamani, 2008; Whitworth, 2006).

Study abroad students who do not join externally organized social networks must create other social opportunities to meet native speakers or leave the matter to chance. Some students accomplish this by frequenting social gathering spots such as dance clubs and athletic clubs (Whitworth, 2006). Another technique involves advertising services as an English tutor in exchange for speaking practice in the target language (Campbell, 1996; Lamani, 2008). Networking is another approach. Many students become acquainted with social contacts through others in their study abroad cohort. Additionally, students can take opportunities to network with their host-national friends which may lead to relationships with the families and friends of their social contacts (Isabelli-García, 2006; Whitworth, 2006).

After meeting native speakers, a study abroad student must find a way to build a relationship with them. Successful ways of accomplishing this include dating relationships (Campbell, 1996; Isabelli-García, 2006; Polanyi, 1995; Whitworth, 2006) home stays (Whitworth, 2006), finding an ally that permits them access to a larger social network (Norton & Toohey, 2001) or offering goods or services and by so doing integrating themselves into a network system of favors and paybacks (Milroy, 1980, Norton & Toohey, 2001). Campbell

(1996) discusses her efforts to accomplish this. "If I were seen as a unique and interesting person, then this group of Mexican teachers would be open to friendship with me" (Campbell, 1996, p. 209)

While the literature contains examples of how study abroad students form social networks (Campbell, 1996; Fraser, 2002; Isabelli-García, 2006; Wilkinson, 1998a; Wilkinson, 1998b; Whitworth, 2006), none of the published studies took place in the Arab world but in Mexico, France, Germany, and Argentina. While the cultures of these four countries are by no means homogeneous, they are all Western countries with a Christian majority. The argument could be made that the different cultural context of a study abroad in Jordan merits a separate investigation into successful social network building strategies. Hence, I will investigate how BYU students in Jordan successfully build target language social networks.

Social Networks and Time on Task

Nora, a case study in Wong-Fillmore's (1976) study, acquired significantly more language than the other children in the study. One difference between Nora and her counterparts that potentially played a role in this was the amount of time she spent with English-speaking social contacts. She played almost exclusively with English-speaking children at school. Additionally, she played almost exclusively with an English-speaking neighbor when not at school. Consequently she spent more time using English than the other children in the study.

Additional studies proffer more evidence of the positive effects of out-of-class language use. The Georgetown Consortium Project compared the oral proficiency gains of nearly 1300 students from various study abroad language programs. They found that the amount of free time students spent with their host families correlated with language gains at a statistically significant level (Vande Berg, 2009). Dewey (2008) found that time spent speaking with friends contributed

to vocabulary acquisition of students in Japan. Brecht and Robinson (1993) found that those who improved the most reported spending large amounts of time with one Russian friend.

While the previously cited research provides evidence that increased time spent with social contacts is beneficial to language learning, a more complete understanding of the relationship between social network makeup and the amount of time spent using the target language is missing. My study aims to resolve this by looking specifically at the size, density, multiplexity, intensity, dispersion and second order zones of study abroad students and how they relate to time spent using the target language. This will afford greater understanding regarding the relationship between social networks and time on task.

Social Networks and Language Acquisition

In addition to spending the most time with English-speaking social contacts, Nora, from the 1976 Wong-Fillmore study, had the most developed English-speaking social network. This is evidenced by the fact that she had many English-speaking friends at school (Wong-Fillmore, 1976). She also had an English-speaking friend outside of school, unlike the other children. Wong-Fillmore (1976) hypothesized that Nora's more developed social network provided her with more exposure to English and facilitated her impressive acquisition of the language.

Several studies provide support for this hypothesis. Dewey (2008) reported that study abroad students in Japan who had a greater number of friends showed greater improvement in vocabulary acquisition. Isabelli-García (2006) qualitatively examined four Spanish students in Argentina and found that the student with the most developed second order zone was also the highest performing. Fraser (2002) studied a group of students studying in Germany and found that those who performed the highest were also members of an organized social group such as a sports team, orchestra or internship. Lybeck (2002) reported that of students in Denmark those

embedded in dense, multiplex social networks displayed more native-like speech. In one case, a student had a falling out with her dense, multiplex social network and native aspects of her speech decreased noticeably. Furthermore, Campbell (1996) commented in her reflective journal study that her well-developed social network helped her speech by saying, "I heard a lot of slang and fillers that I haven't gotten anywhere else" (p. 211).

While the previously cited research offers valuable insights, in terms of the benefits of social networks to language acquisition, a more complete picture of how the makeup of those social networks relates to language acquisition is missing in the current body of literature. This study aims to resolve this by looking specifically at the size, density, multiplexity, intensity, dispersion and second order zones of study abroad students and how they relate to language acquisition. This will afford greater understanding regarding the social aspect of language acquisition while on study abroad.

Conclusion

Multiple studies have highlighted aspects of the relationship between social networks and second language acquisition. In the process they provided insights into social network building and time on task. However, a specific focus on the characteristics of social network makeup, namely size, density, multiplexity, intensity, dispersion and second-order-zone, is missing. Additionally, none of the previously published studies has investigated social networks and second language acquisition in Arabic. This study will look specifically at the social network building practices and social network makeup of students studying Arabic in Jordan. The inquiry will examine the following three questions.

1- How do study abroad students build social networks while abroad?

2- What is the relationship between social networks and time on task while on study abroad?

3- What is the relationship between social networks and language acquisition while on study abroad?

Chapter 3: Research Design

This chapter presents in detail the specifics regarding the design of my research.

The Program-General Requirements

In 2009 a BYU group of approximately 50 students studied in Amman, Jordan, at an Arabic Language Institute. The students were required to attend classes, log 10 hours of speaking practice outside of class per week, log 50 minutes of newscast listening outside of class per week, submit an electronic language learning journal entry five times a week, and meet weekly with an onsite BYU staff member to review their progress.

Cohorts. Students were randomly divided into cohorts of approximately 9 students. Students in these cohorts attended all classes together.

Courses. Students participated in the following courses: Current Events, Close Reading, Jordanian Arabic, Writing, and Listening.

Current events. This class was a discussion forum of events in the news. The purpose of the class was to provide students a context in which to acquire proficiency in reading front-page newspaper articles and practice speaking MSA. It was taught by a native speaking employee of the institute three days a week for one hour.

Close reading. This course primarily focused on specific language forms or expressions encountered in the current events class. A BYU professor taught this course twice a week for one hour.

Jordanian Arabic. This course was an introduction to the speech of urban Jordanians, particularly those living in and around Amman. The content was loosely structured around everyday topics and focused on the needs of the students. Native instructors taught this course five times a week for one hour. The instructors were employees of the institute.

Writing. This class was an introduction to formal Arabic writing. The class content consisted of writing on a range of topics and in a variety of forms. For example: letters, essays, etc. The class was taught twice a week for one hour by a native-speaking employee of the institute.

Listening. This course was an introduction to listening to newscasts. The content included news reports from various news outlets and class discussion required students to converse using MSA. The class was taught by a native speaking employee of the institute three times a week for one hour.

Paid tutors. BYU staff arranged for struggling students to have the option of paid speaking partners/tutors.

Housing arrangements. All participants lived with other BYU study abroad students. The BYU program procured housing for the students in an apartment building near the campus. All but four of the students chose to stay in the apartment building. There were several Arab families living in the building, however, nearly all of the residents in the apartment building were BYU students. Those who opted to find housing elsewhere did so in order to procure less expensive accommodations.

Participants

Thirty-two students volunteered to participate in this study: 27 were males, and five were females. All were BYU undergraduate students, most in their junior or senior year. Prior to the study abroad program they had completed four semesters of Arabic courses consisting of five classroom hours per week. Their language proficiency levels ranged from Intermediate-Low to Advanced-Mid on the ACTFL scale. In order to protect their privacy, all participant names used in this study have been changed.

Instruments

For ease of administration, the Social Network Survey, Language Contact Profile and NEO Five Factor Inventory (NEO FFI) were incorporated into one survey and administered via internet. ("NEO" comes from the original "Neuroticism-Extroversion-Openness Inventory" but only the acronym is used in subsequent versions of the instrument). The appendix contains a copy of this survey with the exception of the NEO FFI which cannot be reproduced due to copyright law. While all questions in this survey elicit valuable data from program participants, the scope of the present research does not permit analyzing responses from all of these questions and only responses to questions pertinent to the focus of this thesis will be addressed.

Social network survey. The Social Network Survey provided both quantitative and qualitative data regarding participants' social networks in Jordan.

Quantitative data. The following quantitative measures relating to participants' social networks are determined by the Social Network Survey: size, intensity, density, clusters, first and second-order zones, and multiplexity. For an explanation of these social network terms please see Figure 2.1 and the accompanying explanation.

Size. Participants listed the names of up to 20 social contacts with whom they have spoken in Arabic and spent at least some time socializing. I chose the upper limit of 20 contacts due to a pilot study where all participants except one entered less than 20 contacts. For statistical analyses, I calculated size as the number of social contacts entered into the survey. For example, the size of the network in figure 3.1 would be calculated as five.
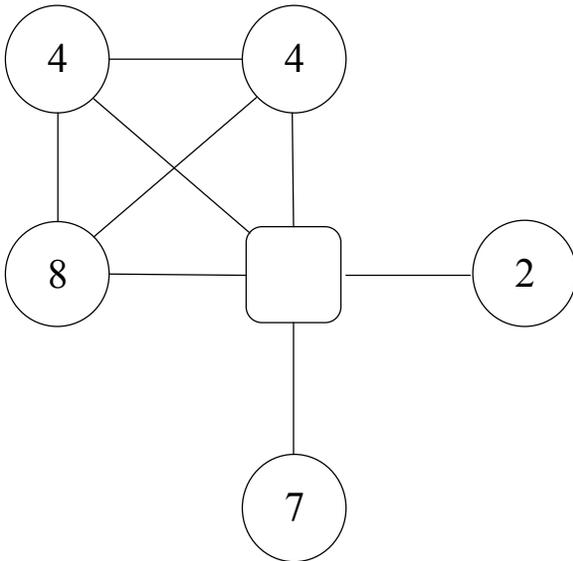
Figure 3.1. Sample social network.

The square in the middle represents the anchorage. The lettered circles represent the anchorage's social contacts.

Intensity. To measure intensity participants were asked to indicate the level of their friendship with each contact on a scale from one to eight. Levels one and two indicate acquaintance. Level three is a transition between acquaintance and friend. Levels four and five indicate that the contact was a friend. Level six is a transition between friend and very close friend/confidant. Levels seven and eight indicate a very close friend or confidant. Figure 3.2 depicts the scale shown to participants when asking them to select a level for each contact.

Figure 3.2. Scale depicting relationship intensity

For statistical analyses, I calculated intensity in two ways. First, for a measure I named total intensity, I calculated the average of all of the intensity entries. For example, the total

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intensity of the sample network in figure 3.1 would be five. The second intensity variable called number of confidants is a frequency count of the number contacts rated at either seven or eight. For example, the number of confidants of the sample network in figure 3.1 would be 2.

Density and dispersion. To measure density and dispersion participants were asked to drag and drop their social contacts into boxes representing groups of people that associate with one another. By grouping their friends and acquaintances participants reveal the density and dispersion of their networks. For statistical analyses, density was calculated two ways. The first measure, number of clusters, refers to the number of clusters (groups of more than one person who associate with one another) in a participant's social network. For example the number of clusters in the sample network in figure 3.1 would be one. The second measure, largest cluster, refers to the number of people in the largest cluster in the network. For example, the largest cluster of the sample network in figure 3.1 would be three. For statistical analyses, dispersion was calculated as the number of clusters plus the number of unconnected contacts with whom the subject associated. For example, the dispersion of the sample network in figure 3.1 would be three.

Multiplexity. Multiplexity was measured by a two part process. First, the survey asks participants to give each group listed in the density measure a name reflecting the reason the individuals in the group associate with one another. Then it asks participants to identify people who belong to more than one group, thus identifying multiplex relationships. For statistical analyses, I calculated multiplexity as the total number of multiplex relationships in a subject's social network.

Second-order zone relationships. Second-order zone relationships are elicited by asking participants to describe how they met each of their social contacts. Meeting a host national

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through another host national qualifies as a second-order zone contact. For statistical analyses, the variable referred to as second-order zone relationships was calculated as the total number of second-order zone relationships in a subject's social network.

Qualitative data. In addition to collecting quantitative data, the Social Network Survey includes a number of questions to elicit qualitative data. The questions read as follows:

(a) Choose three people from your list above that you marked as being the closest of friends (highest score). Please tell why you think you were able to develop good friendships with these people. What allowed you to move up the scale from acquaintance to friend, etc.? (b) Choose three people from your list above that you marked as being lowest in terms of friendship level. Please tell why you think you were not able to develop stronger friendships with these people. Describe anything that may have inhibited friendships with these people. (c) What sorts of things did *you* do to make friends with native Arabic speakers?

Journals. Students were required to electronically submit a language learning journal entry five days per week. Students reported in each entry whether or not they attended all of their classes and completed their assignments. Following this daily report they wrote about their speaking experience that day and reviewed its effectiveness.

The Language Contact Profile. The Language Contact Profile was developed by Barbara Freed, Dan Dewey, Norman Segalowitz, and Randall Halter in 2004. It is an instrument that measures, by way of self report, the number of hours per week spent speaking, listening, reading, and writing in both the language of study and in English. Each of these four skill areas are also broken down into more specified activities. Some examples of these more specified

activities include amount of time spent watching TV, browsing the internet, and speaking with service personnel.

Participants completed a modified post-test version of the Language Contact Profile. In addition to being adapted from a paper to an online version, 11 questions were omitted because they were irrelevant to the research questions of the current study. The order of several other questions was changed in order to eliminate redundancies. Items from several questions were combined into one question and items from other questions were separated to form multiple questions. A copy of the modified version can be found in the appendix .

Oral Proficiency Interview (OPI). Before departing the U.S., all but three participants completed an unofficial Oral Proficiency Interview (OPI), administered by an ACTFL certified interviewer. This interview was rated unofficially at the time by the interviewer and later double rated by registered OPI examiners. Two weeks prior to program completion each student participated in an official ACTFL OPI via telephone.

I converted the scores from these exams from a nominal scale to an interval scale. The interval scale is exponential in nature and was developed by Alan Meredith (1990). Table 3.1 displays the values attributed to each level on the ACTFL scale. I modified the scale slightly to accommodate the three advanced sublevels in the current ACTFL scale as opposed to the two on the original Meredith scale. Table 3.1 also displays the modified scale.

Table 3.1

ACTFL and Meredith scale comparisons

ACTFL SCORE	MODIFIED MEREDITH SCALE	ORIGINAL MEREDITH SCALE
Novice-Low	4	4
Novice-Mid	25	25
Novice-High	64	64
Intermediate-Low	121	121
Intermediate-Mid	400	400
Intermediate-High	1225	1125
Advanced-Low	2500	2500 (Advanced)
Advanced-Mid	3600	3600 (Advanced plus)
Advanced-High	4900	
Superior	6400	6400

NEO Five Factor Inventory. Participants completed the NEO Five Factor Inventory (NEO-FFI). The NEO-FFI is a 60-question personality inventory that measures five dimensions of personality: neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness. The test was developed by Paul T. Costa, Jr. and Robert R. McCrae (1992). Due to the social nature of the study, I included the NEO-FFI to control for personality differences in social network building.

Post-program exam scores. As part of their grade for the program the students took final exams in vocabulary, reading, writing, listening and speaking.

Pre-program test scores. Due to computer problems in Jordan, the participants were unable to complete the reading and listening pre-tests. To compensate for the loss of this data, I substituted the participants' final exam scores from the Arabic 202 course, which ended days before the start of the study abroad program.

Procedures

The procedures of this study were divided into three phases: (a) pre-departure, (b) while abroad, and (c) post program.

Pre-departure phase. Prior to departing participants completed the unofficial OPI exam.

While abroad. Participants submitted five language learning journals per week. Five weeks into the program 15 of 32 participants completed a modified version of the Social Network Survey. Ten weeks into the program 12 of those 15 participants again completed the same modified Social Network Survey. During the last two weeks of the program participants completed the official OPI as well as the post-program speaking, reading, listening, writing, and vocabulary exams.

Post-program phase. One to three months after returning to the U.S., participants completed the Language Contact Profile, the Social Network Survey, and the NEO-FFI personality inventory.

Data Analysis

This section describes the analysis of data obtained from instruments described in the previous section. It is organized into four sections. The first section describes the variables. The following three sections pertain to the three research questions guiding this study.

1- How do study abroad students build social networks while abroad?

2- What is the relationship between social networks and time on task while on study abroad?

3- What is the relationship between social networks and language acquisition while on study abroad?

   The variables. Tables 3.2, 3.3, 3.4, and 3.5 contain the names and descriptions of the variables used in this study. For descriptions of the social network terminology refer to figure 2.1 and the accompanying discussion.

Table 3.2

Social Network Variables

VARIABLE NAME	DESCRIPTION
Size	Calculated as the number of social contacts reported in the social network survey
Total Intensity	Calculated as the sum of the level of intensity entered for each contact in the social network survey divided by the maximum possible level of intensity for that number of contacts.
Number of confidants	An intensity measure calculated as the number of close friends (level 7 or 8) a participant reported having
Number of clusters	A density measure calculated as the number of clusters in a participant's social network as reported in the social network survey
Largest cluster	A density measure calculated as the number of people in the largest cluster of a participant's social network as reported in the social network survey.
Dispersion	Calculated by adding the number of clusters to the number of people in a participant's social network that aren't connected to any others as reported in the social network survey.
Second-order zone	Calculated as the number of contacts participants have made by interactions with their second-order zones as reported in the social network survey.

Table 3.3

Language acquisition variables.

VARIABLE NAME	DESCRIPTION
Pre OPI	Calculated by converting the participant's score on the pre-departure unofficial OPI exam to a score on the modified Meredith scale.
Post OPI	Calculated by converting the participant's score on the post-program OPI exam to a score on the modified Meredith scale.
OPI gain	Calculated by subtracting Pre OPI from Post OPI
Listening gain	Calculated by subtracting the scores on the Arabic 202 final listening exam from the scores on the post-program listening exam.
Post speaking	Score on the BYU post program speaking exam
Post reading	Score on the BYU post program reading exam
Post writing	Score on the BYU post program writing exam
Post vocabulary	Score on the post program vocabulary exam

Table 3.4

Time on task variables

VARIABLE	DESCRIPTION
Time speak	Number of hours spent speaking Arabic per week as reported in the modified Language Contact Profile
Time listen	Number of hours spent listening to Arabic per week as reported in the modified Language Contact Profile
Time read	Number of hours spent reading Arabic per week as reported in the modified Language Contact Profile
Time write	Number of hours spent writing Arabic per week as reported in the modified Language Contact Profile
Total Arabic	The sum of the Speaking Arabic, Listening Arabic, Reading Arabic, and Writing Arabic variables
Time speak English	Number of hours spent speaking English per week as reported in the modified Language Contact Profile
Time listen English	Number of hours spent listening to English per week as reported in the modified Language Contact Profile
Time read English	Number of hours spent reading English per week as reported in the modified Language Contact Profile
Time write English	Number of hours spent writing English per week as reported in the modified Language Contact Profile
Total English	The sum of the Speaking English, Listening English, Reading English, and Writing English variables

Table 3.5

Personality Variables (Costa & McCrae, 1992)

VARIABLE	DESCRIPTION
N	Neuroticism: A higher score indicates a greater propensity for emotional distress.
E	Extroversion: A higher score indicates a greater propensity for positive emotions and gregariousness.
O	Openness to experience: "High-O individuals are imaginative and sensitive to art and beauty and have a rich and complex emotional life; they are intellectually curious, behaviorally flexible, and non-dogmatic in their attitudes and values" (Costa & McCrae, 1992, p. 6).
A	Agreeableness: "High-A individuals are trusting, sympathetic, and cooperative; low-A individuals are cynical, callous, and antagonistic" (Costa & McCrae, 1992, p. 6)
C	Conscientiousness: a higher score indicates a greater drive to succeed.

Building social networks. Data pertaining to this research question were analyzed both quantitatively and qualitatively.

Quantitative analysis. The quantitative analysis herein examines how participants' social networks develop over time and how they met members of their social networks.

Development over time. Interval data from the Social Network Survey, administered after five, 10, and 14 weeks of study abroad experience, are analyzed descriptively in order to create a picture network development over time.

Meeting social contacts. Frequency counts derived from Social Network survey data reveal the most used techniques for meeting social contacts.

Qualitative analysis. The qualitative data from the Social Network Survey and the journals are combed for any information that answers the following research question: "How do students build social networks while on study abroad?" These data are coded by recurring themes.

Social networks and language acquisition. In order to analyze the relationship between social networks and language acquisition while on study abroad, I used both quantitative and qualitative analyses.

Quantitative analysis. The quantitative analysis began with descriptive statistics of the social network variables and the language acquisition variables. See Tables 3.2 and 3.3 for description of the variables. Next, I ran a series of six all possible models regression analyses using the language acquisition measures as the dependent variables and social network variables as predictors.

Qualitative analysis. The qualitative data from the Social Network Survey and the journals were combed for any information that answers the following research question: "How do students build social networks while on study abroad?" These data are coded by recurring themes.

Social networks and time-on-task. I analyzed the relationship between social networks and time on task quantitatively. The analysis began with descriptive statistics of the social network variables and the time on task variables. See Tables 3.2 and 3.4 for descriptions of the variables. Next, I ran a series of ten stepwise regression analyses using the language acquisition measures as the dependent variables and social network variables as predictors.

Personality as a moderating variable. I analyzed the relationship between personality and social networks quantitatively. I entered social networks variables into stepwise regression equations as dependent measures, and the personality measures were entered as predictors.

Limitations

This study has a number of limitations. Among them are:

- Limitations with the sample. (a) Due to the fact that the sample is an intact class it is not random. Instead it is an intact group and sample of convenience. Therefore, the results can only be attributed to the situation at hand and not generalized to other contexts. (b) The sample consists of only 32 participants. (c) The gender distribution of the sample is skewed with 27 male participants but only five female participants. (d) The sample is made up entirely of BYU students. It is unlikely that BYU students are representative of the entire community of study abroad students for multiple reasons. First, they are religiously homogenous. Second, many of them had previously been missionaries for the Church of Jesus Christ of Latter-day Saints. As such many of them had previously learned a language abroad. Consequently, the findings from this study are not generalizable to study abroad populations at large. They are explanatory only of the situation and the sample at hand.

- The majority of the quantitative data were gathered by way of self-report. Self-report data is subject to social desirability bias. Additionally, it is subject to the memory constraints of the participants. In sum, it is not always a reliable means of data collection.

- Response rate for the question designed to elicit multiplexity data was low, only seven of the 32 participants responded. However, the qualitative data suggest that additional multiplex relationships existed. Consequently, any results with regard to multiplexity cannot be considered valid.

Chapter 4: Results

The results in this chapter are organized by research question.

1- How do study abroad students build social networks while abroad?

2- What is the relationship between social networks and time on task while on study abroad?

3- What is the relationship between social networks and language acquisition while on study abroad?

Building Social Networks

The data regarding social network building is broken down into four sections. The first section demonstrates quantitatively the development of the participants' social networks over the length of the program. The last three sections are recurring themes derived from qualitative data from the Social Network Survey and the language learning journals. The first discusses how participants met social contacts. The second discusses why participants chose to pursue or not pursue relationships with social contacts. The third discusses efforts on the part of the participants to develop relationships with social contacts.

Development over time

Weeks 1-5. After five weeks of study abroad experience, fifteen participants completed a shortened version of the Social Networks survey. Tables 4.1 and 4.2 contain statistics describing the students' social networks at that point in the program.

Table 4.1

Descriptive statistics of social network variables after five weeks in country

VARIABLE (N=15)	MEAN	ST. DEV.	MEDIAN	MODE	RANGE
Size	8.3	3.1	10	10	3 – 14
Largest cluster	3.9	1.5	3	3	2 – 6
Number of confidants	.5	.8	0	0	0 – 2
Multiplexity	0	0	0	0	0 – 0
2nd order zone	2.2	2	2	0	0 – 5
Dispersion	4.3	2.4	4	4	2 – 9
Number of clusters	2.2	1.1	2	1	1 - 4

On average the participants were associating with about eight different Arabic speakers. The average size of the largest cluster (or group) that they associated with was about four people in size. On average they had met roughly two of their contacts via introduction by other Arab contacts. None of them had developed multiplex relationships at this point.

Table 4.2

Frequency counts of social network variables after five weeks in country

VARIABLE (N=15)	NUMBER OF STUDENTS WITH THE FEATURE	TOTAL # REPORTED FOR THE GROUP
Intensity (# of confidants)	4	7
Multiplexity (# of relationships	0	0
2nd order (# of relationships)	10	33

Only four of 15 students reported having a confidant (or very close friend) for a group total of seven confidants. In contrast, 10 of 15 participants reported second-order zone relationships (or meeting friends through other friends), for a group total of 33.

   Weeks 6-10. Likewise, after ten weeks of study abroad experience, 13 participants again completed a shortened version of the Social Networks survey. Tables 4.3 and 4.4 contain statistics describing the students' social networks at that point in the program.

Table 4.3

Descriptive statistics of social network variables after 10 weeks in country

VARIABLE (N=13)	MEAN	ST. DEV	MEDIAN	MODE	RANGE
Size	10.71	3.73	10	7	6 -17
Largest cluster	4.1	1.6	4	4	2 – 7
Number of confidants	1.77	2.71	0	0	0 – 7
Multiplexity	0	0	0	0	0
2nd order zone	3.4	2.5	3	2	0 – 8
Dispersion	5.6	2.9	4.5	4	2 -12
Number of clusters	3.2	0.9	3	2	2 – 5

   On average the participants were associating with almost 11 different Arabic speakers. The average size of the largest cluster (or group) that they associated with was about four people in size. On average they had met between three and four of their contacts via introduction by other Arab contacts. None of them had developed any multiplex relationships at this point.

Table 4.4

Descriptive statistics of social network variables after 10 weeks in country

VARIABLE (N=13)	NUMBER OF STUDENTS WHO REPORTED HAVING…	TOTAL NUMBER REPORTED FOR THE GROUP
Intensity (# of confidants)	6	23
Multiplexity (# of relationships	0	0
2nd order (# of relationships)	11	44

Only six of 13 students reported having a confidant (or very close friend) for a group total of 23 confidants. In contrast 11 of 13 participants reported second-order zone relationships (or meeting friends through other friends), for a group total of 44.

Weeks 11-14. Likewise, after completing the study abroad program, 32 participants completed the Social Networks survey. The following chart contains statistics describing the students' social networks for the program as a whole.

Table 4.5

Descriptive statistics of social network variables after 14 weeks in country

VARIABLE	N	M	SD
Size	32	9.16	4.24
Total Intensity	30	.59	.13
Number of Confidants	32	1.66	1.73
Number of Clusters	27	2.37	1.04
Largest Cluster	28	3.86	1.58
Dispersion	27	3.89	1.55
2nd order zone	27	2.67	2.59

On average the participants were associating with about nine different Arabic speakers, and almost four different groups. The average size of the largest cluster (or group) that they associated with was about four people in size. On average they had met about three of their contacts via introduction by other Arab contacts. None of them had developed multiplex relationships.

Table 4.6

Frequency counts of social network variables after 14 weeks in country

VARIABLE	NUMBER OF STUDENTS WHO REPORTED HAVING	TOTAL REPORTED FOR THE GROUP	N
Intensity (# of confidants)	23	53	32
Multiplexity (# of relationships	5	24	32
2nd order (# of relationships)	24	72	27

Twenty-three of thirty-two students reported having a confidant (or very close friend) by the end of the program for a group total of 53 confidants. Similarly, 24 of 27 participants reported second-order zone relationships (or meeting friends through other friends), for a group total of 72. By the end of the program only five of the participants reported developing multiplex relationships.

Meeting social contacts. The Social Network Survey elicited how participants met social contacts. Students were asked to select from a drop-down menu how they met each social contact. The categories for the drop-down menu were: host family, through the BYU program, through another friend, I approached them, they approached me, and other. Table 4.7 displays frequency counts for each of these categories.

Table 4.7

Frequency counts of how participants met Arabic speakers

CATEGORY	NUMBER OF RESPONSES
Home stay	14
Through the BYU program	27
Through another friend	126
I approached them	76
They approached me	26
Other	41
Total	310

Qualitative data from the Social Network Survey and the journals supports each of these categories. The qualitative support will be organized in five sections.

Home stays. Although students did not live in home stays, qualitative data from the Social Network Survey and the journals explains why some students reported meeting contacts via home stay. Some students spent the weekends in the homes of LDS church members in northern Jordan. For purposes of the survey, some students considered these home stays despite their being only part time.

Approaching. The participants used various strategies in order to approach unfamiliar people. Their strategies can be categorized into four groups: (a) cold approach (b) ask a question, (c) offer assistance, (d) business transaction.

Cold approach. Commonly students reported approaching a person and introducing themselves as is demonstrated by the following quotes: "I introduced myself, 'Hi, I'm new here, what's your name etc...'" "I needed more friends, so me and my friend would just sit down next

to random people and simply ask their names and then go from there." "Mostly I just sat down next to people and started talking with them. If things went well, it wasn't long before I knew their whole group of friends. Nearly all of the people I ever talked to were extremely nice and perfectly willing to talk." "Marian, Christine, and I just plopped ourselves down next to some girls in a cafeteria place and started talking with them." "I did make two new friends today, just by saying 'hello'."

One strategy that participants reported in conjunction with the cold approach was to approach Arabic speakers at their place of work. This is demonstrated by the following quotes: "He's the owner of a store right next to our building. He's sort of the 'neighborhood grandpa,' and he's a lot of fun to talk to, so I go over to his little store and talk to him when I get a chance to." "I went into the mosque near my apartment and asked to speak with the *sheik*." "Went into the law building and his door was opened so I asked to talk to him." "I noticed an empty coffee shop, so I went in and began talking with Yusuf, the owner."

Ask a question. A second strategy that participants used to approach Arabic speakers was to ask a question. Often the questions were designed to strike up conversation. This is demonstrated by the following quotes: "We were at a restaurant, sitting at different table. Then I asked him a question about some Saudi guys who were near by. We ended up talking and I went to his house that night for dinner." "Blaine and I started by asking him questions about honor killings that we talked about in class and then it just went from there." "We decided to ask someone about what kind of clubs there were on campus." "We were able to strike up a conversation with him by asking him what a word meant on a sign on his shop." "We talked briefly with some girls trying to find mint as our excuse to initiate the conversation."

In some situations the questions used by the participants were requests for assistance. This is demonstrated by the following quotes: "I was trying to find a particular building on campus and asked them for directions. They helped me and then asked me for my number and then called me and we started meeting after that." "We asked around to try to figure out how to take the service taxi downtown. We didn't understand much but got enough to get us somewhere where someone else could help. We learned the Jordanian word for 'straight ahead.'"

Some students used the premise of conducting research to ask questions. This is demonstrated by the following quote: "Under the guise of writing a report, me and Katie interviewed a group of girls about *Ramadan*."

Another type of question the participants used was a request for language lessons. This is shown by the following quote: "I asked him if he wanted to exchange Arabic lessons for English lessons."

Offer assistance. Several participants reported offering to help others as a means of approaching them. This is illustrated in the following quotes: "Me and Max went around trying to find service opportunities." "After class, I wandered around, wondering how I could approach people. Like it or not, I feel better having an excuse, and one came my way when a girl dropped her phone and I picked it up for her. Within a few minutes, they had sat me down on a bench and were chattering away."

Business transaction. A fourth strategy that participants used to approach Arabic speakers was by way of a business transaction. They reported making regular social contacts doing this in barber shops, salons, book stores, internet cafes, copy centers, book presses, health clubs, corner stores and with their landlords. For example: "He works at a bookstore, and I asked him about some books. He always told me to come visit him after that, so I did." "Malik was one of the

haircutters at the local salon. He cut my hair and I spent quite a bit of time talking with him."
"She was working in the orange mobile company and helped me buy a phone." "I invited one of
the waiters to sit and chat."

Networking. Examples of networking from the journals included: networking with Arab
friends, networking with other study abroad students, networking within organizations,
networking with people who had visited Jordan previously, and networking online.

Networking with Arab friends. The qualitative data contain many examples of students
networking with their Arab friends. The following quotes contain some examples: "I met Samir
while hanging out with Dina's group of friends. I've just ended up spending more time with him
than with any of Dina's other friends. A lot of that has to do with the fact that he's around more
often, but I also find that I get along with him pretty well." "She's the friend of a group I
approached." "I met this guy at Othman's house. Then one night I was walking home and saw
him at a table smoking *argila* outside, I went to say hi and ended up sitting and drinking with
them, Suliman was at the table and that is how I met him." "Find a tribe or big group and there is
always new friends to be made." "I met some new guys from the same group of friends and had
some good introduction conversations."

Networking with other study abroad students. The qualitative data also contain many
examples of students meeting Arab contacts by way of their study abroad colleagues. The
following quotes are examples of this: "My roommate Ellie knew her and introduced me." "I met
him through Zach." "Adrian introduced me to him." "I haven't been very successful in finding
people that I want to talk with again after the first meeting. So I went today with Zach to meet
some of the guys he talks with on a regular basis."

The data additionally show that those who met Arabic speakers through other BYU study abroad students were often likely to network with those Arabic speakers to meet more Arabic speakers. This is demonstrated by the following quotes: "Ellie introduced me to her, and I kind of got sucked into her circle of friends (she's kind of a 'queen bee')." " I met Igor through one of the BYU students. We went and played soccer with him, and he helped me meet a bunch of other friends." "I met them through my other friends: first through my American friends who made friends faster than I did, and then through my Arab friends who already had established circles of friends."

Networking within an organization. Many of the participants reported participating in an organization of some sort and associating with Arabic speakers that they met there. Some of the organizations included internships, church, boy scouts, and sports. The following quotes demonstrate this point: "Half of my speaking was volunteering in the kids' center in Sweileh. It was a lot of fun. Deven asked me to fill in for him for his typing class." "Ralph and I went to a Boy Scout meeting…They have activities every Thursday afternoon, and they've invited us to come back to all of their activities." "The first thing I tried was playing basketball. I figured I could meet some new people with similar interests." "I volunteer to teach English at a center twice/ week, and she is one of the directors. So I talk to her for at least an hour (usually 2) when I'm done teaching every time." "She was a member of the LDS branch in North Amman. I stayed with her family several weekends…She would not get tired of my poor Arabic. She was easy to tease in Arabic, so I joked a lot with her in Arabic. She corrected me sometimes, but the most benefit that I gain from her was self-confidence to speak regardless of my limitations. I felt very comfortable trying to speak."

Networking with people who had been to Jordan previously. Several of these students had acquaintances in the U.S. who had previously spent time in Jordan. They networked with these people prior to their arrival in Jordan. The following quotes demonstrate this phenomenon: "I also met up with one of the girls who was friends with someone last year." "Nate, another BYU student, was her speaking partner the year before." "He was a friend of my American friend in the CLS program."

Networking online. One student (Marian) reported using an online social networking site to meet people in Jordan prior to her arrival there. She said of the experience, "I made friends with some random Jordanian kid on Facebook a few months ago, so he really wanted to meet up with me here."

Being approached. In most instances BYU students who were approached by host-nationals were hanging out on campus. This is demonstrated by the following quote: "I was sitting on a bench and he and Khalid approached me and just started talking."

However in some instances the students did things to instigate others approaching them. Examples are found in the following quotes: Others tried to get Arabic speakers to approach them. Some used conventional means to do this. "I did a lecture about stereotypes at the university to an inter-cultural English class. She and her sister approached us after." "I went and played pool at a local pool hall, Ibrahim and his friend Ahmed were playing snooker, and they invited us to play with them." "I was on the bus and he started talking to me." "He overheard me discussing the *Qur'an* with another boy, joined in, and invited me to come meet talk with him and his fellow employees in the engineering building each day." "Kept stopping to try and figure out our darned map. People kept coming up and asking what we were looking for, so eventually we made it most of the places we needed to go."

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Others were quite creative in their strategies of attracting potential social contacts. For example: "We found a good new way to make friends today. Ralph showed up with a football and a couple of us starting throwing it around in the street and Arabs all around left their benches for the marvel of a spiral. Everyone wanted to learn how to throw a spiral. That was hilarious and they have some butter fingers and/or skillet hands." "Then I pulled out a metal mind-twister game and started to play with it. Soon I was showing the guy next to me how it works, more or less because it's really hard." "For another hr or so we taught 5 or 6 *shabab* some tumbling and wrestling moves. We were drawing quite a crowd, but everything went smoothly."

Through the BYU program. The BYU program took several actions to help students make social contacts in Jordan. First, it offered to provide paid tutors if necessary. Only one student, Wilt, reported using this service. Second, it assigned students to participate in a church program called "Family Home Evening" with local members of the LDS church in Jordan. Most of the students reported meeting at least some of their social contacts via this program. Third, the program organized a hike to Ajlun, a medieval castle, for BYU students as well as Arab students. Only one student reported meeting a social contact through this activity. Fourth, it arranged for some students to travel north on a weekly basis, stay in church members' homes, and attend church with the northern LDS congregation on the weekends.

Which relationships to pursue? The data show that almost all of the participants consciously chose to pursue some relationships and to discontinue others. Of the 13 students who completed the social network survey at five, 10 and 14 weeks, all but one reported discontinuing at least one relationship. Table 4.8 displays statistics describing the rate of discontinuance at different stages of the study abroad program.

Table 4.8

Descriptive statistics for relationship discontinuance

TIME PERIOD	M	SD
Weeks 5-10	4.2	2.7
Weeks 10-14	1.5	1.9

Qualitative data from the Social Network Survey and the journals shed light on this phenomenon. The responses can be categorized into eight groups: (a) emotional connection, (b) common ground, (c) personality traits, (d) language, (e) cultural exchange, (f) accessibility, (g) gender, and (h) smoking.

Emotional connection. Participants reported choosing to pursue relationships because they felt a genuine or emotional connection to certain people. The following quotes demonstrate this point: "I became friends with these people because I didn't view them as a 'speaking assignment'. I actually wanted to see them and chat with them. They were fun to be around and I felt like I could relate to them… Firas in particular, for some reason we just connected. We had a similar background in how we grew up, and how we approach life." "I searched carefully and was really picky about who I spoke with on a regular basis. I prefer not to be superficial in my contacts with people, and a lot of relationships in the Middle East can be that way. I wanted to find people I could really connect with, and so that is what I did. It took some time though, and I met my closest friends in those last two months of the program. I ended up speaking with them late into the nights. It was a lot of fun." "I saw him often as I bought water from him almost every day. I was interested in his history (He fled Palestine in 1948) and he was very willing to talk about it. He would get emotional talking about his family and his hardships and that drew

me to him." "I think I became good friends with Mu'tasim and Ishaq mostly because… they seemed to talk to us more like we were their friends, rather than just interesting foreigners."

Conversely, they chose not to pursue relationships where that connection was missing. The following quotes demonstrate this point: "Isra'a, because she views me more as an exotic pet than a person." "Mua'tasem - He was 'cool' on campus and so when we hung out he just tried to look cool around other people and we didn't converse a ton."

Common ground. Participants reported choosing to pursue relationships because they had common ground with certain people. They found common ground in several ways, for example: activities, interests, friends, humor, language, and culture.

Activities. Some students reported liking similar activities. The following quotes demonstrate this point: "I developed more of a friendship with Suhaib because he seems more involved and wants to do different activities - like going downtown, showing us cool shops, cafes, etc." "Muhammad - He played basketball with me at least once a week, and he was one of the only Arabs I actually thought was any good and worth playing with. There was a common bond there, and we often saw each other outside the court also." "We stayed at Amjad's house every weekend, and ate with his family and played chess. He was terrific." "Fadi was very personable, and we were able to become better friends through soccer. We shared a common interest, and that bled over into other areas."

Conversely, not enjoying the same activities was mentioned as a reason for not pursuing a relationship. This is demonstrated by the following quote: "Abdullah never seems too interested in doing much other than sitting outside the Life Science building - I haven't built much of a rapport because we kind of run out of things to say and just sit there."

Interests. Participants mentioned common interests as a reason for pursuing relationships. The following quotes demonstrate this point: "Baha - He was, like me, planning on going into medicine, so we had a lot of common ground. We spent a lot of time talking about the differences in our schools, as well as our plans in medicine. I approached him because I was in the biology building and was hoping to run into someone with common interests." "Samah, we had a lot of common interests and common ground. We could talk about a lot of things with each other because of that."

Conversely, a lack of common interests was mentioned as a hurdle to developing relationships. This is demonstrated by the following quotes: "Muhammad: like Malik, he was friendly and nice, but ultimately uninteresting and uninterested in me. He studied sports, which I'm wholly uninterested in, and which doesn't prepare one to talk about interesting things." "I had nothing in common with any of them, except for some similar acquaintances. We'd talk, but we really didn't have anything to talk about, because we didn't have any common interests or hobbies. It was actually really boring to talk to them, and I generally only did it when I had to get speaking time for class. That was the biggest hindrance to friendship: talking to them only because I had to. But I think that if I hadn't had to, I probably wouldn't have talked to them at all."

Common friends. Several students mentioned that having friends in common was a deciding factor in pursuing a relationship with certain people. This is demonstrated by the following quotes: "Samir: I spent time with him, and we had friends in common. Knowing the same people made the biggest difference." "Abu Yusuf: Again, it was spending time with him. Knowing him at Church and staying at his house and spending time with his family and knowing

a lot of the same people." "Hamsi was just a fun guy to be around, and since he was best friends with Firas, any friend of Firas was going to be a friend of his."

Humor. Several students reported building common ground through humor. This is demonstrated by the following quotes: "Samoor and his family were very good hearted and charismatic. They all were a simple family that would laugh at my comments or jokes and they always wanted me to stay with them... I believe it was the sense of humor the main ingredient." "We are able to joke and banter back and forth." "He had no problems acting goofy to get his point across to an American that didn't understand Arabic that well."

L3. Several students reported that having a common L3 was a basis for pursuing relationships. This is demonstrated by the following quotes: "Rafif spoke Spanish. She was very interested in Spanish culture. She liked that I gave her compliments, she liked flirting. She was from a higher society and she liked that I was very polite and courteous. She liked that I had strong principles. She also liked that I helped her considerably in Spanish. Her eyes would wide open when talking to me and that made me feel comfortable. She was very welcoming always." "Abdu Rahman - we both spoke Spanish, I was learning Arabic, he was a mellow, religious kid, liked similar types of music, we both liked each other's friends, and I got to meet his family."

Westernized. Lastly, two students reported that the mutual understanding of western culture or thought was reason to pursue a relationship. This is demonstrated by the following quotes: "I met with him a lot. He speaks English very well and is westernized. He also had us over for dinner." "Ibrahim spoke English quite well and was well acquainted with western culture, so despite having met him later on we became really good friends."

Personality traits. Several personality traits such as patience, maturity, talkativeness, and friendliness were reoccurring reasons for pursuing or not pursuing relationships.

Patience. Patience was reported many times as a reason for pursuing relationships and impatience was reported many times as a reason for not pursuing relationships. This is demonstrated by the following quotes: "Zuhair, Yasser, and Muhammad were harder to create relationships with because they were less patient with my Arabic." "Ahmed - I think because he is just a nice guy with no alternative motives. He's patient with my Arabic and willing to sit and talk for hours." "I think that I became good friends with these people because of their laid back nature. They were very friendly people, and were either very patient with my lack of English, or were very interested in America and American life."

Maturity. Maturity was listed multiple times as a reason for pursuing relationships This is demonstrated by the following quotes: "He's an upper-class, stand-up guy who's looking for well-tempered and appropriate friends to associate himself with. For instance, he get's nervous when my less-'reserved' friends run into me." "Doha. She is very nice and seems a lot more mature than many of the other girls our same age on campus so I've been able to have better conversations with her than with a lot of other people. That's one thing that has been hard, many of the people my same age seem much more immature so sometimes it's almost hard to relate to them on the same level." "Shadi is probably my closest friend, we've become closer because our age is similar and he is, in my opinion, more mature than most of the others I've talked to... and I'm able to discuss interesting subjects with him instead of 'hang out lingo'."

Immaturity was listed frequently as a reason not to pursue friendship as is demonstrated by the following quotes: "This is probably because that person is annoying and immature. They're all very nice people, it's just that I'm beginning to learn that as nice as they are, some of the friends I've made are extremely annoying and childish. Not that I'm super mature, but I don't feel like I act like I'm 12, nor do I like to spend my time with people who do."

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Talkativeness. Students reported that some people didn't talk enough and that deterred them in pursuing a relationship. This is demonstrated by the following quotes: "Usai, probably because I don't see him very often and he's not very talkative, I tend to do most of the asking of questions and talking for that matter." "Hasan was extremely kind, but talked very little and spent most of his time smoking. He taught me a little about the *Qur'an*, but eventually had nothing left to say to me." "Malik: we got along fairly well, but there was a limit to what we could talk about. At a certain point of questioning (i.e. when questions got to personal or dealt with too complex of ideas) he would close up and stop talking."

Students also reported that some people talked too much, and that was also a relationship deterrent. This is illustrated in the following quote: "I was able to express myself quite well, only the person I was chatting with really likes to talk, not listen, so I didn't get to say everything I wanted to say."

Friendliness. Multiple students stated friendliness as a reason for pursuing relationships. This is demonstrated by the following quotes: "He was just a really friendly grandpa that loved to have people come around to talk, so it was easy to get to know him." "With each of these girls, I was able to be natural and comfortable because they never laughed at me (in a mean way). They were also around consistently so I never had to work to track them down like I did some of the other girls I talked to. Each of them were patient and friendly."

Lack of friendliness was reported as a reason not to pursue relationships, as demonstrated by the following quote: "Israa and I weren't that close because she wasn't very nice. She would always say mean things right to our faces, but she speaks with a heavy Bedouin accent, so we could never tell what she was saying. She would say something, laugh really hard with Nariman, and all of the other girls would look around uncomfortably. Doha asked me one time if I

understood what Israa said. When I told her that I didn't she mumbled under her breath that it was better that way." "Hamza…spoke fast and slurred his words a lot. And I had the feeling several times that he was doing it to make fun of me."

Language. Language issues such as conversation, understandability, and English use were reported as both reasons to pursue relationships and reasons not to.

Good conversation. Participants consistently listed good conversation as a reason to pursue relationships and the lack thereof as a reason not to. The following quotes are examples of how good conversation motivated students to interact socially with certain people: "I really like Eman. I haven't spent the most time with her, but the time I have spent I really enjoy. We actually talk about real things, as opposed to boys and make-up. Like we talk about politics, our opinions on things, about religion, about families, about standards and morals, and random topics that aren't quite so heavy as well." "I really liked Aya #1 because she was so easy to talk to. She was willing to talk about almost anything (as long as it wasn't something that would scare her that she might get caught by the "*mukhabarat*" [secret police]) and we could talk for hours without running out of things to discuss and neither of us ever ended up being offended. She was also a very intelligent girl with real goals in life, so that helped with keeping the conversation rolling. She talked about books, and things of substance as opposed to boys and make-up and Amr Diab [a pop singer] like all the other immature girls on campus I was acquainted with but did not enjoy talking to." "I got to spend a lot of time with him while the girls were with his wife and daughter. I really enjoyed listening to his viewpoints on a variety of issues which encouraged a deeper relationship."

Conversely the following quotes demonstrate how lack of good conversation impeded relationship building: "Ibrahim was low on the list because he talked about girls constantly…

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Malik only wanted to talk about girls when I was with him, and he increasingly asked me to introduce him to girls in the program, so I avoided him towards the end." "Both Dina and Abeer… were very nice girls, but they were also very shallow and very fake. I know that if I were to have randomly met them in the U.S. instead of Jordan, I probably would not have become friends with them. They only talked about boys and make-up, and they were too caught up in being friends with only those of their higher social class/status." "Seriously, why do all the girls I meet only care about clothes and makeup? Maybe I should go by stereotypes and find some stereotypically nerdy girls to befriend, then maybe they'd have something more interesting to talk about." "It seems like I ran out of things to say to my friends. This means I really need to start planning discussions in order to accomplish a decent speaking day. I need to plan my speaking or find some new people to talk to." "These 3 were a group from the Jaboor clan. I spent a lot of time with them my first month there. Our talk was always very superficial and just meant to be fun-talking about guns, animals, and other random things. We never touched politics or religion. They never invited us over for dinner either." "I was fine with talking with them to get some extra speaking practice in, but speaking with them was a little difficult and there just wasn't a whole lot of authentic discussion. The relationship was fairly superficial."

Understandability. Participants mentioned their ability to understand the way a person speaks as a factor in deciding to pursue a relationship with that person. The following quotes demonstrate lack of understandability as a deterrent to friendship development: "I have come to the conclusion that my friends from Tafila are not the most helpful speaking companions. I've never been able to understand them very well, and I used to think it's because I don't know Arabic. But I've discovered that it's just because they speak very differently from other Jordanians (different words, extremely fast). So I try to say hi to them every day, but I devote

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the majority of my speaking time to other Arabs that are easier to understand and better about helping me understand." "Sultan is very hard to understand. I think our interests (poetry, *sharia*) are similar enough that if we could communicate better, we would be better friends." "Ayat was somewhat harder to understand than the other girls because she was from a village, and I felt bad asking her to repeat herself, so I didn't talk to her as much."

Conversely, students also reported choosing to pursue relationships with people they could understand easily. This is demonstrated by the following quote: "He speaks clearly, so is easier understood."

English. Participants listed speaking English as both a reason for pursuing relationships as well as a reason not to. The following quotes illustrate speaking English as a reason for pursuing relationships: "Wahmii: he was very interested in pursuing the friendship. He was proactive and I was proactive. Also, he disliked Jordan and Jordanian culture, which, though not necessarily good, made it easy for us to talk frankly about problems in society. He also spoke decent English, which helped us communicate more complex ideas." "Talking with them in English early in the program, and especially because my wife spoke only English. Later in the program, they were also willing to help me with Arabic more than before, so we talked in Arabic more."

The following quote demonstrates how not speaking English induced students to pursue relationships: "Zuhair was a genuinely nice guy and didn't have a mean bone in his body. He was also a good person and didn't like to talk about girls like a lot of the other guys. In addition, he didn't speak English. All of these factors meant that I enjoyed spending time with him, and since I spent a lot of time with him, we became close. Osama, like Zuhair, was very nice, only spoke

Arabic, and didn't like to talk about girls. I spent a lot of time with him as well, which allowed us to become close"

Finally, the following quotes illustrate how speaking English played a role in students choosing not to pursue relationships with certain people. For example: "Down sides of today, a couple of my friends were pretty insistent on speaking English. I am figuring out which of my friends are more about being willing to just sit and talk one on one and I am going to pursue them." "I tried to avoid Muhammad because he really enjoyed speaking English with me, and I tried to explain to him I wanted to struggle and learn Arabic, but he insisted on English." "Muhammad and I also traded English for Arabic lessons. However, Muhammad spent most of the time speaking in English, and would immediately switch into English if I didn't understand every single thing he said. This refusal of Arabic held me back in my progress, and thus I found myself less and less wanting to spend time with Muhammad." "Samah and Amer, were good friends, but they never spoke to me in Arabic, so I didn't talk to them too much."

Cultural exchange. Many students mentioned cultural exchanges as reasons for pursuing or not pursuing friendships with their social contacts.

Interest in the U.S./English. Multiple students wrote about their contacts being interested in the U.S. For some this was a reason not to pursue friendship while others still chose to develop relationships under these circumstances. This is illustrated by the following quotes: "Malek wanted to be close friends because he was obsessed with the American way-of-life and wanted to live in America in the future. He spent time with me to understand American culture and meet American girls. Basel was close friends with me to learn English plain and simple." "Raafat was not a close friend because he only wanted to use me to get to America. Once he discovered I could not help him he stopped talking to me." "I don't think I had a great friendship with Ibrahim

mostly because he kind of hung out with everyone in our BYU group, and seemed to be more interested in learning English and about America." "Ismail - He was crazy and just wanted to go to America. He spoke really fast and wasn't patient with my Arabic."

Desire to share Arab culture. Like the previously mentioned factors, students used the desire of their contacts to share Arab culture as both a reason to pursue friendship and a reason not to. This is demonstrated by the following quotes: "Both Fira and Ghadeer were just extremely friendly! They never seemed to tire of talking to me or other BYU students! They were so happy to get to know us and share their culture with us! The more we reciprocated, the more they gave! They were just extremely nice! We spent quite a bit of time talking about Islam, since Fira is studying *Sharia* law. I've never had anyone seem so concerned about my salvation before, and their sincerity really helped me feel close to both of them. Fira was talking to me one time, right before I left, and told me with tears in her eyes that she hoped I would at least consider the things that she had told me about Islam because she said I was a really good person and she didn't want me to have to go to hell. It may sound preachy in writing, but it was one of the most tender moments I've experienced! She was so sincere, and always had been." "Abd Al-Aziz wanted to be close friends because he wanted to help me learn Arabic and teach me more about Islam and Arab customs and traditions. He also might have been lonely because he lived alone." "Nader… never passed by me without pointing his finger in my face and calling me to convert to Islam. As such, after spending several weeks with Nader, it was hard for me to want to spend much more time with him. I didn't have the friendly connection with Nader that I had with his co-worker, Ahmad." "Bakr: he was simply an uninteresting person. He only cared about girls and converting me to Islam (despite his marginal belief in the religion)."

Intercultural offense. One student reported intercultural offense as the reason he chose not to pursue a particular relationship. This is demonstrated by the following quote: "Abd Salam. He also lives a short while in the States, but he is more from a traditional Bedouin family and I also have never been to his home. One day one of their group members looked disgusted when I mentioned bringing my wife over to their place when I went. That really turned me off."

Accessibility. Accessibility was frequently mentioned as the reason that a particular relationship progressed while inaccessibility was frequently blamed for failure of relationships to progress. The following quotes demonstrate accessibility facilitating relationship development: "I made friends with my barbers and with building security guards, all of whom had nothing to do but sit around all day, and all of whom lived on my way walking to and from school." "They were also around consistently so I never had to work to track them down like I did some of the other girls I talked to." "Sohaib - She worked as the secretary at the clinic, and I spent the most time with her than any other of my Arab friends. She was married with a child, and very engaging to talk to and very helpful. I was able to connect with her more easy than the other ladies or doctors at the clinic, for she was the most accessible. I would just pull up a chair next to her and keep her company, while providing some laughs too." "Bander was one of the first people that I approached. He seemed to be very curious, and since he was actually too young to be a college student, he didn't have anything else to preoccupy his time expect talking with me. He was willing to suffer through my bad Arabic."

Inaccessibility causing relationship failure is demonstrated by the following quotes: "Hana just had a busy schedule with school, and she was harder to get in contact with." "Abu Haatim - there were always a lot of customers that would distract him, so our conversations never got too lengthy or deep in one single sitting, I was busy hanging out with my other friends

and didn't have much time to linger, his open hours were sporadic, and I get the feeling he didn't want to talk sometimes for whatever reason."

Gender. Whenever the participants mentioned gender it was to report it as an impediment to friendship development. This is demonstrated by the following quotes: "Abeer was also extremely nice (she invited us to her family's house for dinner), but it was harder to get close to a girl, especially as a married guy." "Marwan was great, I just didn't prefer to become very good friends with guys, because as much as I know that I could trust him, its still a different culture and I didn't want to give any of my friends the wrong idea about me. So I only hung out with him in groups of people, and only talked to him when it was a group conversation. I know that Jordan is more westernized than the other Arab nations, but since I'm American, I tended to automatically be labeled by the locals as someone who might sleep around or whatever… Sooo, despite what perhaps some people might deem acceptable when it came to opposite sex interaction, I didn't feel like taking my chances and only let myself become really good friends with the women." "Samah, Ismaa. With these two I think the main factor was gender, and the different gender roles and expectations that are found in the Arab world."

Developing relationships. The students used a number of strategies to develop friendships with their social contacts. These strategies can be sorted into the following three categories: interpersonal exchanges, intercultural exchanges, and spending time together.

Interpersonal exchanges. Interpersonal exchanges break into seven subcategories which are (1) making them feel comfortable, (2) having good conversations, (3) helping, (4) humor, (5) being interesting, (6) showing interest in them, (7) sharing personal information, and (8) setting boundaries.

Making them feel comfortable. Students reported wanting to make their social contacts feel comfortable with them. The following quote demonstrates this: "My goal was to keep him in his comfort zone."

Having good conversations. Students reported engaging in good conversations as a way to foster close relationships. This is demonstrated by the following quotes: "They started talking about marriage, it was interesting, they'll never really talk about their opinions on stuff like that at the university, but they started having all sorts of discussions about it at their house. One of them said she never wanted to get married and another was talking about someone she knew that had been abusive, it was really pretty sad. It made me realize that I really do enjoy talking to people in Arabic, I wish I could do more things like that because it makes me want to speak Arabic because I really want to be able to communicate with them better, it's a case of inspiring rather than requiring." "I'm happy because I actually had a real conversation today, meaning that one of the girls started sharing about how she was feeling graduating."

Helping. Participants endeavored to help the people they met which in turn deepened their relationships. This is demonstrated by the following quotes: "I met up with my friend Murad and we went to eat at Lubnani Snack because he was famished. He had spent all his money on fixing his car so I bought him lunch. I think that broke the ice (finally). The atmosphere while we were eating lunch was really relaxed and I think we both felt more comfortable than before about asking each other questions." "We met up with our nursing friends who are in charge of the student protest outside the Milk Bar against the high prices of snacks. So, we got involved and helped sell things at the table outside; then, we handed out fliers to all the cute girls that walked by."

Humor. Humor was reported as a way to connect with people and build relationships. This is demonstrated by the following quotes: "I talked to some of Mahmoud's friends and they were from a place in Irbid called grape. I told them I was from tomato and I thought that I was going to have to revive them because they were laughing so hard they almost died." "That's another exciting thing about an expanding vocabulary--I can make more puns. I'm going to start trying to get my friends to tell me jokes in Arabic, and hopefully, I'll start being able to pick up their humor as well as foisting my own upon them."

Being interesting. Many students wrote about doing fun and interesting things that contributed to friendship building. Some of these are illustrated in the following quotes: "I agreed to be the witness for Jack and Muhsin's friendly wager: if Egypt beats America, Jack has to take Muhsin to dinner, but if America beats Egypt, Muhsin has to take Jack to dinner." "Then I tried to teach my friend Samir how to work a Rubik's cube. That one is going to take some practice (my explanation, I mean)." "He likes a girl a lot and so we started ad-libbing poetry in *Fusha* [standard Arabic] to another… which turned out to be really good practice of saying concise, correct and direct *Fusha* [standard Arabic] sentences. It was fun too." "We ended up going through magazines with the oldest daughter and making fun of all the pictures of ridiculous European and American models... in Arabic." "We also did the traditional exchange of favorite YouTube videos, most of which were about Yemen or National Parks in the western United States (apparently camel-jumping is a traditional Yemeni sport)."

Show interest in them. Students reported doing things that demonstrated their interest in their friends. Some of these are illustrated in the following quotes: "Keeping contact with them. I called them. I tried to be nice to them so they would enjoy my company." "Later these same friends picked me up to visit a hurt employee at his house (recovering from surgery). We talked

inside the friend's house, played games with his 1-year-old boy, and watched the news in Arabic." "I spoke with my old friend Ahmed from Salt for a while, mainly about how his tests were going."

Share personal information. Students reported sharing personal information with their friends. This is demonstrated by the following quotes: "I went to see my friends 'breakup fight' today, but the guy never showed up... so we all just sat there and played Truth or Dare (although apparently Arabs don't do dares, they just want truth... and they somehow combined it with spin the bottle just to make things more interesting)" "I struck gold yesterday with my new friends because we instantly got down to business and started hanging. It was really fun. We talked a lot about what life was like back in the States and I opened the dialogue up to whatever they wanted to ask me. So, we talked about my family and what they do, what the university is like there, and particularly the social life." "A girl dropped her phone and I picked it up for her. Within a few minutes, they had sat me down on a bench and were chattering away. They found out I had a boyfriend and grilled me about him, asking me what I thought were decently personal questions like if I wanted to marry him and why wasn't I married and all sorts of other exciting things."

Set boundaries. One student reported an incident where setting boundaries allowed a friendship to develop. He wrote, "I spoke with a friend who, when I first met him, I didn't like at all because [he] was as total pervert. But once he realized we don't like talking about those subjects, he turned into a guy that is actually really enjoyable to talk to."

Intercultural exchanges. Students used intercultural exchanges as a means to develop friendships. The intercultural exchanges that they mentioned can be divided into three subcategories which are: showing interest in their culture or subculture, sharing American culture, and cultural adaptation.

Showing interest in their culture or subculture. Students built relationships by showing interest in an individual's culture or subculture and at times showing solidarity by adapting practices from the cultural or a particular subculture. This is demonstrated by the following quotes: "My biggest success today was the further solidification of my dialect. I've decided to commit myself to the *bedu* dialect." "Towards the end of our meeting, I asked (somewhat hesitantly) if I could give the *Athan* over the minaret while I am here. Surprisingly, he welcomed the idea--and made me a deal: If I memorize the first 20 pages of the *Qur'an* (and recite them for him), he will let me give the call to prayer over the minaret speakers." "I finally found a copy of *il-Liss wa al-Kilab*, which I'm really excited to read)… He got really excited that I was reading a Naguib Mahfouz novel (he's Egyptian)"

Sharing American culture. Students also gave examples of sharing American culture while interacting with their friends. This is demonstrated by the following quotes: "We also somehow got on the subject of music and we learned (well kinda) the *dubka*…and then it was neat because they asked how we dance in America and I tried to teach them a line-dance, but as I did it I tried to describe it in Arabic." "One of Abd al-Aziz's friends came over and we watched "funny" commercials together. The commercials were great because they were in English, so I got to explain why they were funny to my Arab friends." "Malek got all excited because he wants to marry an American girl and he has a crush on Marian. I spent a long time after that explaining to Malek how to pick up on American girls in a way that doesn't creep them out (most Arabs males behave like stalkers . . . just ask Ellie about Laith)." ""I invited Malek over to our Fourth of July party and watch movies and try American food."

Cultural adaptation. Students wrote about their attempts to adapt to Arab culture as a means of building friendships. The following quotes illustrate this: "So rather than try and

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convince them that they are wrong, try and understand why THEY think they are right. I was surprised at how much I would start seeing with understanding why they thought the way they did." "Trying to be a good friend, I visited Abdullah the security guard on campus near the clock tower. I practiced using the Nizar approach, which he shared with us today in class, it is basically to ask people how they are doing in 15 different ways, which I've seen before, but I haven't really used it yet. It worked extremely well! I think I made up for my 2 week absence in one conversation just by asking him how he was doing 10 different ways." "I am still trying to figure out what makes an Arab laugh a lot and some customs. They said that anytime I go to get food I should ask them if they want anything. I did that today and they really liked it."

Spending time. Spending time breaks into six subcategories which are: (1) hanging out, (2) eating, (3) visiting homes, (4) celebrating, (5) hosting, and (6) other activities.

Hanging out. Students mentioned hanging out with their social contacts as a means to build friendships. The following quotes demonstrate this point: "Then, later that night our *shabab* called Paolo and I up, so we met up with them at the usual spot in front of the library and shot the breeze like no one's business." "Today I hung out with my regular group of friends. We talked about kind of regular stuff like shoe size, purses, and boyfriends. It wasn't the most fabulous conversation, but it was interesting because it felt a little more like how I hang-out with my friends. Then my friends from Madaba called and since I hadn't seen them in a long time, I went to campus and tried to talk w/ them, not to get speaking in but because they're my friends." "He seemed nice then so I decided to give him a call and see if he wanted to hang out. We ended up having a blast together."

Eating. Participants wrote about socializing around food as a means of developing relationships. The following quotes demonstrate this point: "Today was Abdu day. Paolo and I

met up with Abdu after his English class and got something to eat at the cafeteria. The bulk of the conversation was trying to work out a trip to two *wadis* and making sure that we're getting a good deal. We talked about how you need to shop around and you can't always take what first comes. Abdu worries a lot about us is the feeling I get, because he's afraid we're going to get swindled or something and blame it on the Middle East, and inadvertently Islam." "I am really humbled by the generosity and hospitality here. Deven and I were with one guy, Salih. I said I was starving so we went to the cafeteria and Salih jumped a head to pay for both of us." "On Wednesday we are going to meet up with them and have *kunaafa*, I'm looking forward to that. Maybe I could ask them how to cook different Jordanian food because I really want to learn and one of them was saying today that she knew how to cook all sorts of stuff." "We grabbed some lunch at *Seveen* and chatted for a bit. I struggle talking to people and eating at the same time. Granted. Then we went for a stroll through campus." "Khalid and I are planning on going to lunch tomorrow, *Inshahallah*." "He eats in the cafeteria every day, so I plan to go back and talk with him in the future." "I met up with a couple of my Saudi friends later and we ate at the stop restaurant and sat at the corner cafe talking about the problems in the gulf."

Visiting homes. Many students reported visiting the homes of their friends. The following quotes demonstrate this: "Tonight we were invited over to some of our friends' house to eat *mansaf*. Even when we tried to get away at 10:30 they insisted it was way too early. They were excellent hosts and we all had a great time." "As soon as I arrived he invited us all to his house to meet his family. His brother drove us over and we talked for two hours with the five sons and the mom." "Today I was invited over to our friend's house, and basically we sat around talking about politics, marriage, work, everybody's life in the room, and so on." "Yes the whole weekend staying overnight with that family was, as usual, lots of good speaking...I learned a lot

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from listening to them tell me jokes..." "Today spoke for 5.5 hours while hanging out at Firas' house with his family." "My roommates and I went out to dinner with a friend then hung out with a bunch of his friends at their house."

Celebrating. Participants often mentioned attending celebrations with their friends. For example: "Kim and I got semi-invited to the henna party for the wedding of one of the sister's of our friend." "I spoke for two hours, going to my friend's graduation, which was a cultural adventure, slightly less stuffy than a US affair." "They left us with an invitation to come to their oldest daughter's engagement party on Thursday night (which I hope we can make it to)." "I invited him to my birthday party this week and he invited me to a concert next week… our friendship is definitely growing." "Kim and I met up with some girls we had met the day before and wished one of the girls happy birthday and gave her a CD that Kim burned for her. They gave us some treats they had told us about the day before and we started talking."

Hosting. Hosting their friends was another relationship-building activity that students reported engaging in. The following quotes demonstrate this point: "Invited our friends from Madaba over and learned to play host for the first time." "A dinner [my friends] and I were putting on for our Iraqi friends Ghadeer, Intisar, and Lana." "My friend Usama is going home for the break tomorrow, so I invited him to eat lunch with my wife and me."

Other Activities. Students wrote about participating in a myriad of other activities with their friends. Some of these included going to classes, museums, sports or theatrical events, traveling, going out on the town, etc. The following quotes illustrate some of these: "Jack and I went eating chilling in a *maqha* [coffee shop] and joyriding with Firas in his car. It was pretty sweet." "They offered to show us the museum on campus which I hadn't even known existed and we walked around there." "The girls decided that they wanted to give all of us make-overs

(so I ended up coming home wearing more make-up than I've ever worn before)." "Watching the first half of the USA-Egypt soccer game with our Saudi neighbors." "I went to Jerash with a friend of mine, Nabil. We met more of his friends, and one of them named Amood hosted us in his home to eat *mansaf*. Afterwards, we went together to a pool house to play billiards and ping pong; then, we wandered the streets talking to random people in Jerash with Nabil." "Today was my second day at Abdu's class and the teacher enjoys calling on me to give examples of correct English pronunciation which is good, because everyone gets to know me a little more and they start to ask me questions and my opinion on certain things during the class." "Today I again met up with the Arab boys who want me to join their band. The drummer found me a bass—so I quickly learned the two songs they want to perform in a "battle of the bands" tomorrow. While waiting for the guitarist to arrive, I spoke in Arabic with the drummer and three female groupies who sat in on our rehearsal. I asked them about their majors and the types of music that they like." "Yesterday me and Derek went to Irbid to hang out with Raafat all day (I met Raafat on campus and he invited me to visit him)…The Shoha family is probably the richest family in Irbid, but also probably the nicest. Raafat spent the entire morning and afternoon driving us around town. First we went to a farmer museum and learned the names for all the old school farming implements and attire (plow, animal trap, porcupine, etc.). Then we saw a number of churches and went to McDonalds. We stopped at Raafat's dad's office and talked with him for a while about his work (he never did tell us exactly what he did . . . kinda shady). Then we walked around downtown Irbid and met countless uncles, cousins, and friends. In the evening we picked up Raafat's cousin and drove an hour to Um Qias on the Syrian border, where some Roman ruins are. At a check point on the way our car got searched and I got to use the verb "to search" from the news. At Um Qais we learned the words for amphitheater, columns, the Sea of Galilee, the

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Golan Heights, etc. The ruins and the view were amazing. We drove back to Irbid after that and hung out with Raafat's friends while they drank coffee. Then we went home, getting back at 12:30 AM."

Social Networks and Language Acquisition

Social network survey. In order to shed light on the relationship between social networks and language acquisition while on study abroad, both quantitative and qualitative data were analyzed. The quantitative analysis begins with descriptive statistics for each of the language variables found in Table 4.9. Table 3.3 contains descriptions of each of the variables.

Table 4.9

Descriptive statistics of language variables

VARIABLE	N	M	SD
Pre OPI	29	695.45	664.30
Post OPI	32	2636.59	1139.98
OPI gain	29	1872.52	1117.95
Listening gain	30	.28	.10
Post reading	32	.68	.18
Post writing	31	86.63	12.09
Post vocabulary	31	.69	.17
Post speaking	32	63.29	10.17

Language Gain. A variety of measures indicated language gain. To calculate the gain in speaking Arabic over the duration of the program I subtracted the pre-program OPI score from the post-program OPI score. Then I ran a stepwise regression using the OPI gain as the dependent variable and the social network variables in Table 4.1 as independent variables. Tables 4.10 and 4.11 show the results of the regression test. The regression showed that the number of second order contacts is a negative predictor of OPI gain while total intensity and number of clusters are positive predictors of OPI gain.

Table 4.10

Regression analysis using OPI gain and social network variables

DEPENDENT VARIABLE	PREDICTORS	R^2	ADJUSTED R^2	P
OPI gain	Second order zone Total intensity Number of clusters	.470	.364	.020

Table 4.11

Coefficients of regression analysis using OPI gain and social network variables

PREDICTOR	B	STANDARD ERROR	STANDARDIZED COEFFICIENT	T	P
Second-order zone	-174.6	70.1	-.49	-2.5	.025
Total intensity	2834.8	1304.8	.41	2.2	.046
Number of clusters	551.4	220.6	.49	2.5	.025

Next I determined the listening gain by subtracting the scores from the Arabic 202 final listening exam from the listening post-test scores. I ran a stepwise regression test using listening gain as the dependent variable and social network variables as independent variables. Tables 4.12 and 4.13 display the results of this test. The results show that number of confidants is a predictor of listening gain.

Table 4.12

Regression analysis using listening gain and social network variables

DEPENDENT VARIABLE	PREDICTORS	R^2	ADJUSTED R^2	P
Listening gain	# of confidants	.314	.273	.013

Table 4.13

Coefficients of regression analysis using listening gain and social network variables

PREDICTOR	B	STANDARD ERROR	STANDARDIZED COEFFICIENT	T	P
# of confidants	.043	.016	.40	2.8	.013

Post-program language performance. Performance on language measures administered by the BYU staff at the end of the program was another indicator of progress. I ran stepwise regression tests with scores from the speaking post-test, reading post-test, writing post-test, and vocabulary post-test as the dependent variables respectively and the social networks variables from Table 3.2 as independent variables. I also adjusted for preprogram proficiency by using the Arabic 202 final exam score as a co-variant.

None of these tests produced any significant predictors. However, the results are suggestive that the number of second-order zone contacts is a predictor of performance on the speaking post-test as the dependent variable. The results are displayed in tables 4.14 and 4.15.

Table 4.14

Regression analysis of the speaking post-test and social network variables

DEPENDENT VARIABLE	PREDICTORS	R^2	ADJUSTED R^2	P
Colloquial speaking post-test	Arabic 202 final exam Second order zone contacts	.361	.302	.007

Table 4.15

Coefficients of regression analysis using speaking post-test and social network variables

PREDICTOR	B	STANDARD ERROR	STANDARDIZED COEFFICIENT	T	P
Second order zone contacts	2.17	1.07	.34	2.02	.056

Language learning journals. The journals contain evidence of language learning in each of the components of language acquisition namely: speaking, listening, reading, writing, grammar, vocabulary, pronunciation, communicative competence, and culture.

Speaking. The following quotes provide evidence of students learning to speak more accurately and more fluently by interacting with their social networks: "Practiced tons of imperative forms, especially negative imperatives." "Today I practiced talking about processes in a unique way, by learning how they potty train at the orphanage." "I liked having Tamer's sister there because sometimes, because I talk with Tamer a lot, I start to talk a certain way and have to back up and say things more clearly." "Today I repeated the same story about my trip about 3 times and it helped me so that by the end I was learning new words and saying things faster and better."

Listening. The journals also gave evidence of students learning to listen more accurately and more fluently by interacting with their social networks: "I also had a goal to pick out words I could hear in conversation but didn't understand and stop them person in order for them to explain the meaning. That's what I did with the word humidity. He said it's when there is 'water in the air'." "I also figured out how to say that I was used to doing something, and that was nice, since I had been wondering it for some time. Amir just said it, and even though I had never specifically heard it before, I immediately understood what he had said, and was able to write it down and understand how to use it with his help." "Totally just chilled with the guys and realized, wow, I've really come a very long way. I think it hit me between … understanding the effects of the moon phases on human behavior (bio-rhythm), and having people ask me what I was doing later so we could hang out (meaning I was interesting enough to hang with outside of school)."

Reading. The following quotes demonstrate circumstances where the participants' social networks aided them in developing reading skills: "One thing that was really helpful tonight is that they asked me to read graffiti and street signs and billboards and stuff. It made me more aware of my weaknesses in reading simple stuff like street signs." "I took advantage and played the clueless American role and had them zip me through a lot of newspaper articles."

Writing. Students also reported developing writing skills like typing, transliterating, and composing while interacting with their social networks as demonstrated by the following quotes: "Half of my speaking was volunteering in the kids' center in Sweileh. It was a lot of fun. Harry asked me to fill in for him for his typing class. Only one student--Dua' showed up--so I tutored her in typing. It was all in Arabic. In addition to speaking in a situation that was well out of my linguistic comfort zone (which feels really good), I got to work on my own Arabic typing skills,

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too." "And it's been fun to learn how they transliterate online." "It was advantageous because I realized that there's really nothing more useful then preparing something beforehand and bringing it to them to look over and revise. I mean, doing homework with them is one thing, but bringing them recreational writing and thoughts of your own? That's the bet."

Grammar. Students also reported learning grammar from dealings with social contacts. Some contacts helped students go over grammatical principles as the following examples show: "He tried to teach me some grammar concepts, but he didn't speak English. He went over فاعل إسم with me and made me write some after a couple of verbs he wrote. I found this very useful since I need a lot of help with grammar." "He tested me on all of my *ammiya* [colloquial Arabic] verbs and gave me examples of how those verbs are used."

They also learned grammar principles when their social contacts corrected them, as demonstrated in the following quotes: "[I] noticed a problem I had today with agreement because I said something and then Imani (the girls who was telling me stories) repeated the way people do kind of automatically and I noticed that she made an adjective feminine when I hadn't." "To keep improving on conjugations, I'm going to ask my friends to correct me; me paying attention to myself has, so far, not been enough to solidify conjugations."

They also learned grammar principles just by hearing them, as demonstrated in the following quote: "Today I noticed a lot of active participles being used with verbs I didn't know. I was excited to pick up on them regardless of my knowledge of the actual word."

They also used social interactions to practice grammatical forms that they had learned. For example: "Worked on consequence language (if you do this, then you will be in time out)."

Vocabulary. Students reported learning hundreds of words from social interactions that can be classified into six categories: everyday, technical, academic, slang, dialect specific,

idiomatic expressions, religious, grammatical and cultural.

The everyday words range from words like "to knock," "leak," "to start a relationship," "mosquito," and "squash". Some of the technical terms reported were "in vitro fertilization," "lattisimus dorsi," and "bio-rhythm". Some of the academic terms reported were "technological innovation," "Holocaust," and "Bernoulli's principle". Some of the slang terms reported were "cool guy," "hottie," "hanging out," "troublemaker," "push me," and "stuck up". Some of the dialect specific terms reported were, "a *Bedu* phrase for 'shut up'" and "a *Bedu* phrase for 'I don't understand'". Some of the idiomatic expressions learned were "chicken scratch or *kharbiish djaj*," "What is your opinion on drinking tea? meaning Do you want to get some tea?" and "What's your problem? You're big and you still need a diaper." Some of the religious terms reported were "to fast," "forgiveness," and "a cool *hadith* saying that I am not 100 percent sure on what is says, but it is something about the importance of learning languages I believe." One of the grammatical terms learned were the term for "those people". Some of the cultural terms learned were "*shabriya*, which is the curved knife they use," "the Arabic version of Eini Meenie Meini Moe," and "what to say when someone passes away, like his girlfriend back in Palestine about a year ago".

In addition to learning new vocabulary, students reported situations where social networks helped them to solidify or better understand vocabulary they already knew. The following quotes are a demonstration of this point: "I did learn from them that the word I had been using for 'to think' actually meant 'to believe' and, while it worked, there was a better word to use." "I walked with them and re-learned the word for ice cream." "Also, Salah reviewed with me the difference between 'both' and 'two.'"

Another way that social networks aided in vocabulary learning was to help students

differentiate between the vernacular and standard Arabic. The following quotes demonstrate this point: "We talked with a couple of people sitting on the benches near the clock tower and pretty much spent the whole time learning the new [Jordanian] words for the Egyptian ones we kept using." "I liked talking to him because he actually corrected me when I'd accidentally speak in *FusHa* [standard Arabic] or Egyptian (most people point out Egyptian, but no one corrects my *FusHa* into *Amiyya* [colloquial Arabic])." "Salaah helped me a lot by correcting *fushah* [standard Arabic] words I use and teaching me *ammiya* [colloquial Arabic] substitutes." "They also told me that "*hissa*" is "now" in *aamiya* [colloquial Arabic], not "*al-an*" which I had been using."

Pronunciation. The following quotes demonstrate pronunciation learning within social networks: "I need to work on pronouncing my *ayns* [an Arabic letter], there was a girl (yes, it was weird) that I was talking to on campus for a while today who kept correcting me on words where I didn't pronounce the *ayn* clearly enough." "Today the employees tried to help me perfect my accent and correctly pronounce the more awkward Arabic sounds." "My friends corrected some of my letter sounds—teaching me exactly where I should put my tongue for certain sounds."

Communicative Competence. The following quotes demonstrate the development of communicative competence in social networks: "It was interesting to hear their different responses and reasoning but even more important was me being able to see and hear how an Arab puts together a coherent, more or less, argument. Hearing their responses and responding to them helped me to better understand how to convince others of your viewpoints in Arabic. I found that saying something like "in my opinion there are 3 blank blank blank: the first is that…. The second is that… the third is that…" this is a good way to stay organized and effective in conveying my opinions in Arabic… I'm going to practice this more." "Every time I compliment

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someone, they reply by saying "*Inta hilu*" or "*inta jamil*" or things like that. So I am going to

start doing it, because it seems like the polite thing to do." "It was interesting to hear an extended

story told in *Fusha* [standard Arabic]--I noticed that you can use rhetorical questions as

connectors of sentences/filler while you think of what you will say next."

  Culture. Finally, the journals showed evidence of cultural learning by interacting with

social networks: "They taught me the words for various aspects of going to the bathroom, most

of which they made sure I would never repeat or even write down, then told me that there is no

polite way of dealing with farts because they are not supposed to happen...ever, or even to be

talked about." "He cracked a joke about Iowa, and we got it. I'm really excited about the idea of

getting Arabic humor. Honestly, humor is the best part of language, and it would be pretty

boring to speak a language if you couldn't somehow use it for the purpose of humor." "We had

talked about weddings in our writing class, but I didn't really understand everything that she had

said, as I was super tired, but I asked Samiir about it, and he explained how it all worked to me."

Social Networks and Time on Task

  I quantitatively analyzed the relationship between time on task and social network

variables using a number of multiple regression analyses. To begin, I computed descriptive

statistics for each of the time on task variables from Table 3.4. These are displayed in Table 4.16.

Table 4.16

Descriptive statistics of time on task variables

VARIABLE	N	M	SD
Time speak Arabic	31	20.55	9.48
Time Listen Arabic	31	4.23	4.01
Time Read Arabic	31	16.35	5.10
Time Write Arabic	31	3.56	3.16
Total Arabic	31	44.69	12.84
Time speak English	31	30.84	16.78
Time Listen English	31	7.29	6.48
Time read English	31	5.39	3.45
Time Write English	31	3.74	4.06
Total English	31	47.26	16.37

Next, I ran a series of 10 stepwise regression tests using the time on task variables as dependent variables and the social network variables as predictors. The outcomes showed that social network variables were not predictors of time spent listening to Arabic, writing Arabic, speaking English, listening to English, reading English, or total time spent using English.

Dispersion came out as a significant predictor for time spent speaking Arabic. For each additional unit of dispersion, I would predict that a participant would spend 2.92 more hours speaking Arabic per week. Tables 4.17 and 4.18 display the results from this test.

Table 4.17

Regression analysis using time speaking Arabic and social network variables

DEPENDENT VARIABLE	PREDICTORS	R^2	ADJUSTED R^2	P
Speak Arabic	dispersion	.230	.197	.013

Table 4.18

Coefficients of regression analysis using time speaking Arabic and social network variables

PREDICTOR	B	STANDARD ERROR	STANDARDIZED COEFFICIENT	T	P
Dispersion	2.92	1.09	.48	2.67	.013

Largest cluster size was a significant predictor for time spent reading Arabic. For each additional individual in a participant's largest cluster, I would predict that a participant would spend 1.55 more hours reading Arabic per week. Tables 4.19 and 4.20 display the results from this test.

Table 4.19

Regression analysis using time reading Arabic and social network variables

DEPENDENT VARIABLE	PREDICTORS	R^2	ADJUSTED R^2	P
Read Arabic	Largest cluster	.235	.204	.010

Table 4.20

Coefficients of regression analysis using time reading Arabic and social network variables

PREDICTOR	B	STANDARD ERROR	STANDARDIZED COEFFICIENT	T	P
Largest cluster	1.55	.56	.49	2.77	.010

Dispersion was a significant predictor for total time spent using Arabic. For each additional unit of dispersion in a participant's network, I would predict that they would spend 4.55 more hours using Arabic per week. Tables 4.21 and 4.22 display the results from this test.

Table 4.21

Regression analysis using total Arabic and social network variables

DEPENDENT VARIABLE	PREDICTORS	R^2	ADJUSTED R^2	P
Total Arabic	Dispersion	.298	.269	.004

Table 4.22

Coefficients of regression analysis using total Arabic and social network variables

PREDICTOR	B	STANDARD ERROR	STANDARDIZED COEFFICIENT	T	P
Dispersion	4.55	1.43	.55	3.19	.004

Size and Number of confidants were significant predictors of time spent writing English. For each additional individual in a participant's network, I would predict that they would spend .57 more hours writing English per week. For each additional confidant in a participant's

network I would predict that they would spend 1.3 less hours writing English per week. Tables

4.23 and 4.24 display the results from this test.

Table 4.23

Regression analysis using time writing English and social network variables

DEPENDENT VARIABLE	PREDICTORS	R^2	ADJUSTED R^2	P
Writing English	Size # of confidants	.279	.228	.010

Table 4.24

Coefficients of regression analysis using time writing English and social network variables

PREDICTOR	B	STANDARD ERROR	STANDARDIZED COEFFICIENT	T	P
Size	.57	.19	.61	.3.05	.005
# of confidants	-1.3	.46	-.55	-2.79	.009

Social Networks and Personality

In order to determine whether or not personality was a moderating variable in this experiment, participants completed the NEO five-factor inventory (Costa & McCrae, 1992). I ran a series of seven stepwise regression analyses using the social network variables in Table 3.2 as dependent variables and scores from the NEO five- factor inventory as independent variables. None of the personality factors were significant predictors of any of the social network variables.

Chapter 5: Discussion and Conclusion

The results of this study provide a number of insights into how study abroad students form social networks, the relationship between social networks and language acquisition while on study abroad, and the relationship between social networks and time on task while on study abroad. The following discussion will be organized by research question.

Building Social Networks

Trends in descriptive data. Table 5.1 displays statistics describing the social network variables measured by the Social Network Survey. Participants took the survey at five weeks, ten weeks and after completion of the 14-week program. The statistics from these three distributions are presented side by side. Upon closer examination they demonstrate an interesting trend. The largest growth of the participants' social networks takes place during the first five weeks in country. The social networks continue to grow and develop from five to 10 weeks. Then from 10 to 14 weeks they decrease slightly.

Table 5.1

Descriptive statistics of social networks after five, 10, and 14 weeks

	M AFTER 5 WEEKS	SD AFTER 5 WEEKS	M AFTER 10 WEEKS	SD AFTER 10 WEEKS	M AFTER 14 WEEKS	SD AFTER 14 WEEKS
Size	8.3	3.1	10.7	3.7	9.2	4.2
Number of confidants	.5	.8	1.8	2.7	1.7	1.7
Number of clusters	2.2	1.1	3.2	2.5	2.4	1.0
Largest cluster	3.9	1.5	4.1	1.6	3.9	1.6
Dispersion	4.3	2.4	5.6	2.9	3.9	1.6
2nd order zone	2.2	2	3.4	2.5	2.7	2.6

Further explanation of this trend is found in the data. From weeks five to 10 the participants discontinued an average of 4.2 relationships and added an average of 6.6 relationships. In contrast, from weeks 10 to 14 they discontinued an average of 1.5 relationships and didn't add any new relationships. The journals provide additional insight by revealing factors that influence students to discontinue relationships. While the reasons were many and varied, some of the journal entries gave evidence that as students' language skills grew they were able to recognize more quickly their compatibility, or lack thereof, with social contacts. Hence, their rate of relationship discontinuance could be less during the latter portion of the program because they had added fewer incompatible people to their networks in the first place. This is demonstrated by the following quote: "I learned some new words like horny and masturbation and I consider these important due to all of the perverts I have met. I felt it necessary to know when I need to tell someone to shut up or when I should get up and leave. These new additions should help me sift through new people."

While the fact that students will terminate some relationships is inevitable, whether or not they will do so in a culturally appropriate manner is not. The journals contain evidence that students discontinued relationships by avoiding the other party or only maintaining a minimum amount of contact. This is demonstrated in the following quotes: "I tried to avoid Muhammad because he really enjoyed speaking English with me." "I have come to the conclusion that my friends from Tafila are not the most helpful speaking companions… So I try to say hi to them every day, but I devote the majority of my speaking time to other Arabs that are easier to understand and better about helping me understand." Discontinuing relationships in either of these ways is bound to have cultural implications. This highlights the importance of making

students aware of those implications and instructing them how to discontinue a relationship in a culturally appropriate manner.

Network size. The average size of the BYU students' social networks was larger than others found in the literature. The average network, after 14 weeks, consisted of 9.2 people. Only one published study exists containing exact descriptions of the participants' network sizes after a similar length of time, and interestingly the average network size was 6.75 (Isabelli-García, 2006).

The way that the BYU students met their contacts provides some insight as to why this might be the case. The students in Isabelli-García's (2006) study met the bulk of their contacts within the framework of organized networks like classes and internships. Aside from these they met their contacts via networking, at social hubs, and at program-organized activities. BYU students also reported meeting social contacts in each of these ways. However, they also reported meeting people by approaching them. In fact, meeting social contacts in this manner was second only to networking on the list of strategies used to meet social contacts. Students in each of the two previously published studies that tracked how students met their social contacts did not do this (Isabelli-García, 2006; Whitworth, 2006).

There are several possible explanations for the fact that BYU students approached strangers while the other students did not. The first was a program requirement for them to speak outside of class for a minimum of two hours a day. If they did not have someone to speak with they had to find someone. Second, many of the BYU students had previously been missionaries for the Church of Jesus Christ of Latter-day Saints. As missionaries, they approached people in order to share with them their missionary message. Consequently, it is possible that this aspect of missionary culture carried over into their study abroad experience.

A third possible explanation could be a function of Arab culture which permits approaching strangers and at times obliges those being approached to be hospitable (Kanafani, 1993). The number of BYU students that were approached by Jordanians is additional evidence of this cultural characteristic. Conversely, study abroad students in France felt uncomfortable approaching strangers because French cultural expectations frown upon doing so (Whitworth, 2006). The campus culture at the University of Jordan may have additionally facilitated BYU students in approaching host nationals. The campus is a social hub where scores of students pass the day sitting in groups even after their classes have concluded. Consequently, these circumstances provided BYU students with an abundance of easily approachable strangers.

The relevance of these findings to study abroad program design is multifaceted. First, it underscores the importance of making students aware that it is socially acceptable to approach strangers in Jordan and much of the Middle East (Kanafani, 1993). Students of languages other than Arabic could benefit from instruction that helps them see how, as foreigners, they can at times get away with socially awkward practices such as approaching strangers. Second, students could benefit from the compilation of a list of possible strategies used to approach strangers. Such a list could be used to coach students who are struggling. Third, students could benefit from the compilation of a list of the strategies used in order to get others to approach them.

Intercultural adaptation. A third point of discussion pertaining to social network building stems from the strategies students used to develop relationships with their social contacts. Nearly all of the strategies students used could be classified as general social skills with the exception of strategies related to intercultural adaptation. Excerpts from the journals demonstrate some of the intercultural adaptation strategies that students used.

First, the journals showed evidence of students recognizing a deficiency in intercultural knowledge and consciously deciding to seek out information to correct the deficiency. The following quotes are examples of this: "Friendship means a lot more giving here and I do not quite know how to give in a friendship. I need to find out." "I am still trying to figure out what makes an Arab laugh a lot and some customs."

The journals also showed evidence of students recognizing and experimenting with speech acts. The following quotes demonstrate this: "I am learning more about how to make friends with different kinds of Arabs and how to compliment them." "Trying to be a good friend, I visited Abdullah the security guard on campus near the clock tower. I practiced using the Nizar approach, which he shared with us today in class, it is basically to ask people how they are doing in 15 different ways, which I've seen before, but I haven't really used it yet. It worked extremely well! I think I made up for my two week absence in one conversation just by asking him how he was doing 10 different ways." "I also noticed that they really do ask you all over again how you are doing after they've been sitting there for a while as I'd been sitting down for a while and then there was a lull in the conversation and then the girl I was next to asked me how I was doing."

The journals give evidence of students making social blunders and resolving to correct them. The following quotes are examples of this: "I saw Abdullah the security guard again. He once again reinforced the cultural lesson that you have to see your friends frequently or else they will think something is wrong. I haven't seen him in a week or two and he said, "What is wrong? Where have you been?" So I'm going to have to work on keeping up with my friends." "I visited my Frosti friend, who inquired why I hadn't been there in a while, and if anything was wrong. Wow, this cultural expectation is pretty stark."

Lastly, the journals provide evidence of students receiving cultural instruction from their social contacts. "They said that anytime I go to get food I should ask them if they want anything. I did that today and they really liked it."

These findings have several implications. First, program administrators could use the sociocultural mistakes of previous students in order to improve the experience of future study abroad students in two ways. Past students' experiences could be used to coach students through socially uncomfortable situations. Additionally, an inventory of such mistakes could provide educators with a base upon which could be built an intercultural learning curriculum.

These findings also implicate the possible benefit that could come from speech act training. Data from language learning journals could inform study abroad administrators about the specific speech act situations that their students are encountering. Again, an inventory of these situations could provide a base upon which could be built a speech act curriculum that could be used prior to study abroad or while abroad.

Gender. Culture specific gender expectations also played a role in social network building. Examples from student journals as well as responses from the Social Network Survey demonstrate that inter-gender relations were one reason that relationships did not develop. As a common rule males and females who are not related interact socially much less in the Arab world than in the West, and the cultural code of conduct for inter-gender relationships differs markedly between the two especially with regard to dating (Davis & Davis, 1993). Consequently, this cultural practice was an impediment to forming friendships with those of the opposite sex. This differs from the examples of social network building already in the literature where dating has been a standard social network building procedure (Campbell, 1996; Isabelli-García, 2006; Whitworth, 2006). The following quotes demonstrate intercultural adaptation to

gender roles: "Kim and I decided to take off after talking to the two guys because we thought we might have lots of guys come talk to us after they saw those two talking, and that is generally pretty awkward." "I think he is more of an acquaintance just because we haven't hung out a ton. When we are hanging out we are friends and get along well, but it's not the kind of thing where we call each other to hang out all the time. I'm fine with that though because I would rather make more friends that are girls than guys." "Marwan was great, I just didn't prefer to become very good friends with guys, because as much as I know that I could trust him, its still a different culture and I didn't want to give any of my friends the wrong idea about me. So I only hung out with him in groups of people, and only talked to him when it was a group conversation. I know that Jordan is more westernized than the other Arab nations, but since I'm American, I tended to automatically be labeled by the locals as someone who might sleep around or whatever... Sooo, despite what perhaps some people might deem acceptable when it came to opposite sex interaction, I didn't feel like taking my chances and only let myself become really good friends with the women."

These findings point to the necessity of helping study abroad students recognize the social advantages of their gender. It is very common for female study abroad students in the Arab world to focus on the disadvantages of their gender as demonstrated above. A closer look at Arab culture shows advantages for both genders. Male study abroad students clearly have the advantage in the public sphere (Fernea, 1993). However, female study abroad students have the advantage in the private sphere. Because a veiled Arab woman will rarely unveil in the presence of men who are not her relatives, male study abroad students cannot integrate fully into the conservative Arab family (Fernea, 1993). On the other hand, female study abroad students can gain access to intimate family interactions where the women are unveiled.

Social Networks and Language Acquisition

The data from this study indicate there is a relationship between social networks and language acquisition. Four of seven of the social networks variables were predictors for at least one of the language acquisition variables. (See Table 3.2 for explanations of the social network variables and Table 3.3 for explanations of the language acquisition variables.)

Intensity. Intensity, or the depth of the relationships in a participant's social network, was measured in two ways: 1) total intensity was an average depth of relationship measure for the entire network, 2) number of confidants was the number of very close friends, or confidants, in a participant's network. Both were positive predictors for gains in the target language. The number of confidants was a predictor of listening gain and total intensity was a significant predictor of gains in speaking.

The journals and previous research provide insight into why intensity measures positively related to language gains. First, deeper friendships could hedge against the linguistic consequences of negative affect by assisting students with cultural adjustment (Tanaka et. al, 1997). Better adjusted students might be less likely to mentally withdraw from the host culture and as a result miss out on the linguistic experiences that facilitate language acquisition. Second, various students wrote in their journals about striving not to tune out when a conversation was too difficult. Multiple students set goals to stop the conversation and negotiate for meaning when they caught themselves tuning out. It may well be the case that students feel more comfortable stopping the conversation and negotiating for meaning when they are conversing with a close friend. By negotiating for meaning students can turn otherwise incomprehensible input into comprehensible input (Krashen, 1985) and improve their chances of converting input into intake.

Additionally, qualitative data from the Social Network Survey indicate that study abroad students spend more time with their close friends. This is demonstrated by the following quotes: "Tamer: More than anything out of all the people I had tried to talk to previously, he was the most like me, had the same interests and genuinely wanted to be my friend, he loved my wife and spending time with us outside of just speaking to each other. I spent a lot of time with him too." "Firas, Malik, and Abd Al-Rahman. Basically, I became friends with these people because I didn't view them as a 'speaking assignment.' I actually wanted to see them and chat with them. They were fun to be around and I felt like I could relate to them. They were also really patient because they would help me to advance in my language skills. Firas in particular, for some reason we just connected. We had a similar background in how we grew up, and how we approach life. As the numbers indicate, we spent a significant time together." "Zuhair was a genuinely nice guy and didn't have a mean bone in his body. He was also a good person and didn't like to talk about girls like a lot of the other guys. In addition, he didn't speak English. All of these factors meant that I enjoyed spending time with him, and since I spent a lot of time with him, we became close."

Finally, there is the story of Forrest. To the surprise of the study abroad administrators, he scored well above all other students on the post-program speaking exam. Following the exam the program director asked him how he, an unlikely candidate due to pre-program performance, had achieved such proficiency. He replied that unlike some of his fellow students, "I just chose to keep liking my friends."

Due to limitations regarding the sample, these results may not be fully generalizable to other populations and additional studies are needed in order to determine their generalizability. However, implications based on the indications of these findings are as follows. Study abroad

administrators could inform students that opening themselves to true friendship with Arabs will likely improve their chances of greater success in learning the language.

Number of clusters. A second predictor of speaking gain is the number of clusters in a subject's social network. (For an explanation of clusters see figure 2.1 and the accompanying explanation.) The highest number of clusters in a participant's network was four. There were four students, Dallin, Forrest, Nick, and Wes, who each had four clusters in their network. A closer look at these students reveals some interesting trends. All four were high achievers. As previously mentioned, Forrest was the number one achiever for the entire group on the speaking post-test while Dallin got the third highest score and Wes the fourth. Wes tied for the number one achiever as measured by the post-program OPI exam and speaking gain. Nick did not excel to the same degree as the other three but still scored in the top third of the class.

With this in mind, I investigated their pre-program proficiency. Dallin and Wes had exceptionally high pre-program scores, but Forrest and Nick were fairly average students. Forrest ranked 27 of 48 on the Arabic 202 final exam and Nick ranked 20. Their pre-program OPI scores were average as well. Both scored Intermediate-Mid along with nine other participants. This group of 11 constituted the middle of the pack while 10 students scored above Intermediate-Mid and eight students scored below.

These students also exhibited high intensity scores. Only six of 32 participants reported having more than two very close friends or confidants. Forrest, Nick, and Wes were three of them. Additionally, their total intensity scores (with the exception of Nick whose total intensity score was missing from the data) were all in the top 50% of the group. Dallin was number 13 of 31. Forrest ranked number nine, and Wes ranked number six.

A closer look at the journal data provides possible explanations for this. One reason that some relationships didn't develop was inaccessibility. A network with a greater number of clusters hedges the participant against some social contacts being unavailable or inaccessible.

In addition to increased accessibility, a network with a greater number of clusters provides more interaction time within clusters as opposed to interacting with a single individual. Past studies show that involvement in high-density, multiplex clusters can be linked to more native-like speech (Isabelli-García, 2006; Lybeck, 2002). One reason for this could be that interacting in clusters can result in proficient speakers of English, who might otherwise speak English with a study abroad student, speaking Arabic with their peers in the group. The study abroad student can then take advantage of being in a setting where Arabic is used quite naturally. I noticed this personally while observing a BYU study abroad student in Jordan in 2006 who developed considerable speaking ability. He spent about two hours a day with a group of Jordanian youth. One on one with him his friends were likely to speak in English, which they spoke very well, but in the larger group setting they typically used Arabic. At first, he could understand little, but he persevered. Toward the end of the program he understood well the conversation around him and could participate in it as an established member of the group.

Due to limitations with the sample, these results may not be fully generalizable to other populations. However, implications based on the indications of this study are as follows. Program administrators could inform students of the benefits of interacting in clusters and of having multiple clusters. Additionally, they could coach students to be strategic in their social network formation.

Second-order zone. In order to test the findings from the Isabelli-Garcia (2006) case study, where the student with the most developed second-order zone was also the student that

exhibited the greatest language gains, I included the second-order zone measure in this study. (For an explanation of second-order zone see Figure 2.1 and the accompanying explanation.) The results of this study were the opposite of Isabelli-García's findings and showed that the measure was a negative predictor for gain in speaking. However, a closer look at the individuals in this study reveals that Forrest was comparable the student in the Isabelli-García (2006) case study. Forrest had 13 second-order zone contacts, which was by far the most in the group. Like the top performer in the Isabelli-García (2006) study, he was the top performer on the speaking post-test and his attitude remained positive throughout the duration of the program.

Unfortunately these findings only raise additional questions. Further research will be required that more specifically looks at the relationship of second-order zone contacts to language acquisition in order to make any conclusions about the matter.

Evidence from the journals. The language learning journals provide additional insight into the relationship between social networks and language acquisition while on study abroad. They reveal the acquisition of speaking, listening, reading, writing, grammar, vocabulary, pronunciation, communicative competence, and culture. They also highlight some notable strengths of study abroad programs as compared to traditional university courses or summer immersion programs.

Three such strengths are mentioned below. First, several students wrote about conducting primary research in the target language about target culture issues such as honor killings and Islam. Second, multiple students reported that their acquaintances corrected and coached them in their language use. This was particularly true with regard to grammar and pronunciation. Finally, students reported learning various things that increased their communicative competence. They reported learning to understand host nationals' humor and use humor understandable to host

nationals. They learned cultural oddities, like Jordanian tongue twisters, the equivalents of Pig Latin and eini meenie meinie moe, and to say something "like a Jordanian would say it." They reported learning and using slang words like "stuck up," "cool guy," "hottie," "hanging out," and "troublemaker." One student said, "I learned how and when it is appropriate to make certain clicking noises (to show annoyance, to jokingly mock another etc…)"

Since Freed, Segalowitz, and Dewey (2004) found that their participants in French summer immersion programs in the U.S. gained more language and spent more time using the target language than their participants studying in France, the strengths and weaknesses of both types of programs have been discussed (Rifkin, 2005). These findings, as examples of linguistic advantages available only to study abroad students, could contribute meaningfully to this debate.

Social Networks and Time on Task

The data from this study indicate that there is a relationship between social networks variables and time on task variables. Social network variables have predictive value for three of the five Arabic time-on-task variables: speaking Arabic, reading Arabic, and total Arabic but not for listening to Arabic or writing Arabic. (Tables 3.2 and 3.4 provide descriptions of the variables.)

Dispersion. Dispersion was measured as the number of contexts in which a participant interacts. (See Table 2.1 and accompanying prose for a description of dispersion.) This was the social network variable that most predicted time spent using Arabic. It was a positive predictor of speaking Arabic and total Arabic use. Entries from participant journal entries provide a possible explanation for why this was so. Students indicated that the accessibility of their friends, or their ability to meet with friends, influenced the amount of Arabic they used. Students made many comments about being unable to meet with certain friends, including their being on holiday, too

busy, living far away, or not coming to campus. Those with higher dispersion levels were likely hedged against these types of situations, as their opportunities to meet with native speakers and use Arabic were not as diminished as those with lower dispersion levels when certain friends were unavailable.

However, despite predicting time spent using Arabic, dispersion did not predict language gains. It may be that when students speak in many different contexts the relationships in those contexts remain superficial as opposed to intensifying. As a result, the conversations remain routine and students have diminished opportunities to practice communicating at a deeper level. This is illustrated by the following quote: "These three were a group from the Jaboor clan. I spent a lot of time with them my first month there. Our talk was always very superficial and just meant to be fun-talking about guns, animals, and other random things. We never touched politics or religion."

Largest cluster. Largest cluster was a predictor for the amount of time spent reading Arabic, but like dispersion, it did not predict language gains or performance. (See Table 3.2 for an explanation of largest cluster). A closer look at the students with the largest cluster reveals some interesting trends. Kim, Nancy, and Richard tied for having the largest cluster. As a group their social networks tended to be low in intensity. All three were in the bottom third of the sample for total intensity, and Nancy and Kim didn't have any friends whom they considered close. In her responses to the social network survey Kim wrote, "I am not really close to anyone. It takes me a very long time to confide and trust people beyond any general level. I hangout with these girls on campus, but not at their homes or mine. I am okay with that at this point."

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As a group they engaged more in non-interactive Arabic language activities. Kim was second-to-last in number of hours spent speaking Arabic per week. Richard reported the most time spent reading Arabic per week. Richard and Kim were in the top four for time spent writing Arabic per week. They also engaged more in non-interactive English activities. Nancy and Kim were in the top five for time spent reading English. Nancy was number one in writing English and the number three total English user.

After interviewing the program director about the situations of these three students, it appears that their attraction to large clusters is a fairly complex matter. At least one of these students, Kim, seems to have been drawn to participation in large clusters as a way to avoid becoming emotionally close to others. Large groups could facilitate this by providing students with opportunities to fulfill their daily speaking requirements while not requiring them to interact at great length with any one member of the group. Consequently, they could avoid intimate settings which could require them to open up emotionally. The quantitative data also suggest that, as people who spend more time doing non interactive activities like reading and writing, they could have been avoiding interaction in general. In the case of Richard, possibly the least successful student in the program, the attraction to large clusters could have come from a desire to avoid looking unintelligent while speaking Arabic. Large groups allow for this by allowing quieter members to participate as observers and not demanding extensive interaction from them.

These findings suggest that social network monitoring could be used to detect avoidance behavior. This could be beneficial as an early warning system for students beginning to stray from good study abroad practices. Additionally, the data indicate that being strategic while building social networks could be advantageous to study abroad students.

Intensity. The number of confidants in a participant's network was a negative predictor of time spent writing English per week. (For a description of "number of confidants" see Table 3.2). This suggests that students' social needs will be met one way or another: with Arab friends, Americans friends, or socializing online. It appears that social engineering (choosing to satisfy social needs with Arabs) is indeed useful to language learning (Brecht & Robinson, 1993). This finding again underscores the importance of intensity and suggests the importance of making that known to study abroad students and coaching them in strategic social network choices.

Social Networks, Language Acquisition, and Time on Task

The fact that the social network variables have some predictive power pertaining to the language acquisition variables and the time on task variables has already been discussed. However, a closer look at the results reveals an interesting trend. None of the network variables that predict time on task predict language acquisition and vice versa.

With this in mind, I decided to look at time on task measures as predictors of language acquisition, and language acquisition measures as predictors of time on task. After a series of stepwise regression analyses time on task measures, with one exception, did not predict language acquisition (Time spent writing Arabic negatively predicted performance on the writing post-test.). On the contrary, language acquisition measures did have predictive value for time on task. The notable results of these tests show that listening skills are positive predictors of time on task and reading skills are negative predictors of time on task. These results are displayed in Tables 5.2 and 5.3

Table 5.2

Regression analysis using total Arabic use and language acquisition variables

DEPENDENT VARIABLE	PREDICTORS	R^2	ADJUSTED R^2	P
Total Arabic use	Reading post-test Listening gain	.260	.203	.020

Table 5.3

Coefficients of regression analysis using total Arabic use and language acquisition variables

PREDICTOR	B	STANDARD ERROR	STANDARDIZED COEFFICIENT	T	P
Reading post-test	-50.629	16.959	-.671	-2.985	.006
Listening gain	65.486	28.141	.523	2.327	.028

While these results might seem counterintuitive to the beliefs of the language teaching community, they do provide some interesting insights. When interviewed, the program director of the 2009 BYU study abroad in Jordan expressed the belief that time spent writing negatively predicted performance on the writing post-test because more proficient writers would finish their writing assignments more quickly and move on to other things. Conversely, less proficient writers spent more time finishing their assignments.

The results in Tables 5.2 and 5.3 suggest the possibility of a similar situation with regard to reading. The BYU program is heavily focused on reading. The average number of hours spent using Arabic per week was 44.69. Of those, 16.35 were spent reading Arabic. Much of this was assigned reading for the Close Reading class. As was the case with writing, those with higher

reading proficiency probably finished their reading assignments in less time while those with lower reading proficiency labored long hours in order to finish their reading assignments. Because the BYU program was so reading intensive, the extra hours the weaker readers spent reading to complete their assignments resulted in a significant predictive relationship.

These findings indicate that study abroad administrators need to be aware of the plight of those who struggle with reading and writing. Coaching them in reading and writing strategies would be one way to assist them. Additional options could be organizing remedial training or encouraging them to seek help from their social networks. Setting higher standards for those admitted to the program might also be advised. After observing that BYU faculty spent a disproportionate amount of their time trying to help unprepared participants make the most of the 2010 study abroad program, they came to the conclusion that it would be in the interests of all to set higher standards for admission.

Personality as a Moderator

Personality did not predict any of the social network variables. While this is counterintuitive, one possible explanation lies in the existence of a daily assignment to complete two hours of speaking outside of class. Perhaps students were driven to fulfill the two hour a day speaking quota regardless of their personality type. Fulfilling this requirement practically guarantees social network formation.

Suggestions for Future Research

This study described the development of study abroad students' social networks as well as illuminated the relationship between social networks, language acquisition, and time on task. Its completion brings to light a number of new possibilities for research. Among them are:

- An analysis of the study abroad student's entire social network. This study investigated their social networks of host nationals but failed to include their interactions with other study abroad students. Past research indicates that the inclusion of both parts of their network could provide meaningful insights into the relationship between social networks, language acquisition, and time on task (Krywulak, 1995; Whitworth, 2006).

- An inquiry into the speech forms gained from social networks. Past research shows that women in the Arab world use forms associated with Modern Standard Arabic less than men (Bassiouney, 2009). Does this pattern manifest itself in the speech of female study abroad students whose social networks are made up of Middle Eastern women?

Conclusion

The scope of this research project spanned three problems facing study abroad students. First, many return home without achieving the language gains they had the potential to achieve (Isabelli-García, 2006; Lamani, 2008; Whitworth, 2006). Second, many avoid using the target language (Isabelli-García, 2006; Pellegrino-Aveni, 2005; Whitworth, 2006). Third, many report difficulty making friends with host nationals (Campbell, 1996; Whitworth, 2006; Wilkinson, 1998b).

Owing to research results showing that students who spent more time with host nationals in social networks experienced greater language gains (Brecht & Robinson, 1993; Dewey, 2008; Vande Berg, 2009) and that students with more developed social networks experienced language improvement (Dewey, 2008; Fraser, 2002; Isabelli-García, 2006; Lybeck, 2002), I determined to investigate the relationship between social networks and the problems mentioned in the previous paragraph. The investigation was guided by the following three questions:

1- How do study abroad students build social networks while abroad?

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2- What is the relationship between social networks and time on task while on study abroad?

3- What is the relationship between social networks and language acquisition while on study abroad?

The findings of this investigation were threefold. First, they illustrated how students successfully met social contacts, chose which relationships to pursue, and pursued these relationships. Second, they shed light on the relationship between social networks and language acquisition by illuminating the positive association between intensity and interaction within clusters to linguistic performance. Third, they showed a relationship between social networks and time on task. The social network structures that had predictive value for time on task were dispersion, largest cluster, and number of confidants.

These findings suggest allocating increased program resources to assisting students in their social network building efforts. Making students aware of these findings and coaching them to be strategic in their social network building could be beneficial to both language acquisition and time on task. Additionally, study abroad administrators and individual students could use social network monitoring as a means of uncovering avoidance behavior.

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Appendix:

The Social Network Survey and Modified Language Contact Profile

1. In the boxes below, please write, from memory, **the names of friends or acquaintances who you spoke Arabic with or native speakers of Arabic with whom you regularly spoke in English** who fit the following description in all respects:

- You *at least occasionally* spoke Arabic to them.

- You know them well enough to have spent at least some time socializing with them.

If you had more than twenty friends with whom you at least occasionally spoke Arabic, please simply list the fifteen with whom you spoke Arabic most regularly.

To help you think about people you could name, think about people you met at school, in the community, through internships, or people you lived with, as well as people you were introduced to through friends or others.

Person 1 ☐

Person 2 ☐

Person 3 ☐

Person 4 ☐

Person 5 ☐

2. Using the drop-down menu on the left, indicate the category that best describes how you met each person. In the text box on the right please elaborate on the details of your meeting.   The boxes will fit more than it might appear. Please feel free to write as much as you need to.

How you met this person   Please Elaborate

How You Met

3. Please use the drop-down menus to answer each question.

On average how many hours did you spend with this person per month?

What percentage of that time did you spend doing activities in Arabic? (reading, writing, speaking, listening to music, watching TV, etc.)

What percentage of that time did you spend doing activities in English? (speaking, reading, writing, listening to music, watching TV etc.)

For each of the people in your list, please indicate the level of your friendship, ranging from mere acquaintance to very close friend/confidant.

Note that in terms of communication, level of friendship ranges from engaging in occasional friendly exchanges (low on the scale) to sharing one's deepest feelings or asking for advice regarding personal challenges (high on the scale). Refer to the diagram below to help interpret the range.

Acquaintance			Friend			Very Close Friend/Confidant	
1	2	3	4	5	6	7	8

4. What topics did you talk most about with the people you listed? The text boxes are small, but will take as many topics as you wish to write for each person, so please list all common topics you can think of.

5. Choose three people from your list above that you marked as being the closest of friends (highest score). Please tell why you think you were able to develop good friendships with these people? What allowed you to move up the scale from acquaintance to friend, etc.

1	QID84		TE	ML	

6. Choose three people from your list above that you marked as being lowest in terms of friendship level. Please tell why you think you were not able to develop stronger friendships with these people? Describe anything that may have inhibited friendships with these people.

7. What were some obstacles that kept you from speaking Arabic with these people?

8. What did your study abroad program do to help you make native speaking friends or acquaintances while in Jordan?

9. What more could your study abroad program have done to help you make native speaking friends or acquaintances while in Jordan?

1	QID34		TE	ML	

10. What sorts of things did *you* do to make friends with native Arabic speakers?

11. There are four parts to this question (A-D).

Part A.

For this item you will help us identify which people know each other and how they know each other by grouping together the people you listed according to where they should know each other from (and possibly where you got to know them). For example, if three of the people are host family members, you would group them together by dragging their names to the "Host Family" box. If four of the people worked at your internship site and knew each other as a result, you would group them together by dragging their names to the "Group 1" box and then giving the box "Group 1" the label "Internship Site" in the blank below. Clubs, community organizations, etc. could also be used as group labels.

If people belong to more than one group, place them in their primary group (the group they are most tightly linked to).

After dragging people to their groups, please be sure to define each group in the text fields that follow (Part B) so we can understand how the people know each other. If you have more groups

than there are boxes, please use the next question (Part C) to describe who these groups are and how they are made up (the people and the group names).

Host Family (Homestay)

Group 1

6

Group 2

Items

Group 3

Group 4

Group 5

Part B

Label for Group 1 [   ]

Label for Group 2 [   ]

Label for Group 3 [   ]

Label for Group 4 [   ]

Label for Group 5 [   ]

Part C

If there were more groups than six (Homestay plus five others), please list the groups and their members here.

Part D

If people belonged to more than one group, please list these people and their additional groups here. (Give each name with that person's additional group or groups.)

11. Please indicate approximately how much time you feel you spent per week during your study abroad experience doing each of the following. Please look at your total at the bottom and make sure the hours add up to a reasonable sum. If you were to spend every waking hour (sleeping 8 hours a day) using Arabic or English as described below, you would have a maximum total of 112 hours.

- Speaking Arabic

  | 0 |

- Listening to Arabic (radio, television, music, etc.)

  | 0 |

- Reading Arabic

  | 0 |

- Writing Arabic

  | 0 |

- Speaking English

  | 0 |

- Listening to English (podcasts, radio, television, music, etc.)

  | 0 |

- Reading English

  | 0 |

- Writing in English

0					

- Total

0	1	QID100	1|2|3|4|5|6|7|8|9|10	CS	VRTL
TX					

Please write in the boxes to the right the number of hours you think you spent on each of the activities listed each week. Except for time spent in Arabic language classes, these activities are all done outside of class.

Please pay careful attention the language listed. The first series of questions deals mainly with Arabic and the last mainly English, but there is some variation between, so please pay close attention.

We realize that you may have spent less than an hour or parts of hours on some of these activities. In these cases be sure to use decimals to indicate partial hours. For example, fifteen minutes would be .25, thirty .50, etc.

Again, please look at your total at the bottom and make sure the hours add up to a reasonable sum. If you were to spend every waking hour (sleeping 8 hours a day) using Arabic or English as described below, you would have a maximum total of 112 hours. Most people would spend considerably less than this. As another example, a person who spent eight hours a day in the activities listed below for seven days a week would spend approximately 56 hours using Arabic or English as described below.

- Studying in Arabic language classes

```
 0
```

- Speaking Arabic with your instructors outside of class

```
 0
```

- Speaking Arabic with your classmates (non-native speakers)

```
 0
```

- Speaking Arabic with a host family, native Japanese-speaking roommate, or other

  Japanese speakers in the dormitory

```
 0
```

- Speaking Arabic with other friends who are native or fluent speakers

```
 0
```

- Speaking Arabic with other people (acquaintances, store clerks, service personnel, etc.)

```
 0
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- Speaking a language other than English or Arabic

```
 0
```

- Speaking English to native or near-native speakers of Arabic

```
 0
```

- Reading in Arabic for homework purposes

```
 0
```

- Reading novels, magazines, or other literature in Arabic

```
 0
```

- Reading schedules, announcements, menus, and similar items in Arabic

```
 0
```

- Browsing the Internet or reading email in Arabic

  | 0 |

- Watching television, movies, DVDs, etc. in Arabic

  | 0 |

- Listening to the radio in Arabic

  | 0 |

- Listening to music in Arabic

  | 0 |

- Trying to catch other peoples' conversations in Arabic

  | 0 |

- Writing homework assignments in Arabic

  | 0 |

- Writing email messages, personal notes or letters in Arabic

  | 0 |

- Other activities in Arabic [_____]

  | 0 |

- Reading newspapers, magazines, or novels in English

  | 0 |

- Watching television, movies, DVDs, etc. in English

  | 0 |

- Listening to radio or other broadcasts in English

  | 0 |

- Browsing the Internet or reading email in English

  | 0 |

- Writing email messages, personal notes or letters, etc. in English

  | 0 |

- Other activities in English [   ]

  | 0 |