Implementing Mental Contrasting to Improve English Language Learner Social Networks

Hannah Trimble Brown

Brigham Young University

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Implementing Mental Contrasting to Improve English Language Learner Social Networks

Hannah Trimble Brown

A thesis submitted to the faculty of Brigham Young University in partial fulfillment of the requirements for the degree of

Master of Arts

Dan P. Dewey, Chair
Jennifer Bown
Norman W. Evans

Department of Linguistics
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ABSTRACT

Implementing Mental Contrasting to Improve English Language Learner Social Networks

Hannah Trimble Brown
Department of Linguistics, BYU
Master of Arts

The present study looks at how utilizing mental contrasting with implementation intentions (MCII), a form of self-regulation, impacts the social networks of English language learners’ in a study abroad (SA) setting. Over 100 English language learners (ELLs) form the treatment and control groups for this study. This research compares the social network measures between students who used MCII and those who did not over the course of one 14-week semester in an intensive English program in the United States. It also examines students' perception of this self-regulation strategy. Additionally, the impact of MCII on students who are in their first semester of the program versus returning students is compared. The quantitative data show that the most meaningful differences between the control and treatment groups are in terms of social network size and intensity, with MCII students having more and closer social relationships with English speakers by the end of the semester. When comparing new and returning students who used MCII, new students show meaningful and significant gains in the size, intensity, and density of their social networks. A survey of students’ perceptions toward MCII reveal that over 67% of participants agreed that this strategy was beneficial, which they expound on in entries to writing prompts given throughout the semester. In summary, MCII appears to be beneficial in helping ELLs in their social network development on SA, especially those who are first-semester students.

Keywords: study abroad, social networks, intensive English program, mental contrasting, self-regulation
ACKNOWLEDGEMENTS

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I acknowledge the expertise of Dr. Dennis Eggett, who has assisted me many times in the statistical analysis and interpretation of my data. I am also grateful for Drs. Jennifer Bown and Norman Evans, for their much needed feedback and suggestions on this project. Lastly, I owe thanks to Dan Dewey, who has answered countless questions, provided me with many opportunities to learn and grow, and been a wonderful mentor throughout this process.
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**Introduction**

Interaction is of particular interest to learners who participate in a study abroad program. Although beneficial, communication with native speakers comes with many challenges, regardless of how involved or helpful the study abroad program is. Mental contrasting with implementation intentions (MCII) is a self-regulation strategy that has helped individuals successfully alter their behavior in a variety of areas (Oettingen, 2012; Kirk, Oettingen, & Gollwitzer 2013), and has been recently applied to the social interactions, known as social networks, that study abroad language learners experience (Lee, Dewey, Brown, & Belnap, 2018). Research done in this area indicates a positive relationship between using MCII and contracting social networks during study abroad, but further research is needed to determine the impact of this form of self-regulation. This study explores the effects of MCII on social networks among 107 English language learners studying abroad in an intensive English program in the United States over the period of 14 weeks. It compares control and treatment groups, and students who are in their first semester (new) versus returning to the English program. Surveys and free-write responses provide us with both quantitative and qualitative data to help us understand this relatively new area of research.

**Review of Literature**

Interaction has been a long-time studied concept in language learning. The notion that interaction fosters linguistic development became known as the interaction hypothesis (Johnson, K., & Johnson, H., 1999; Allwright, 1984), which upholds the belief that face-to-face communication in a second language (L2) promotes proficiency. Interaction is also the central element in communicative language teaching, where authentic language use and communication in the L2 is key (Savignon, 1997). To determine what makes interaction essential in language learning, many
aspects of it have been dissected and researched in terms of input, output, interactional modification, negotiation, collaborative dialogue, and so on, in an attempt to discover why and how it is helpful to language learners. For example, Long (1985) studied interaction in terms of target language use, negotiation of meaning, and comprehensible input. He stated that the effectiveness of language learning was enhanced when learners had to negotiate for meaning, thus ensuring that the input they received was at a comprehensible level. Krashen (1985) explored the concept of comprehensible input and i + 1 during interaction. His research indicates that linguistic competence is increased through input that is slightly more advanced than the interlocuter’s current language abilities. Additionally, Pica, Young, and Doughty (1987) proposed that interactional modification is necessary in order to make input comprehensible. Though there is still some uncertainty about exactly how interaction impacts the development of the L2, there is overall agreement that it is beneficial and even vital to language learning.

By definition, interaction is a social occurrence, since it must happen between at least two individuals. Since social elements can greatly influence the degree to which interaction in the L2 takes place, it is necessary to understand what social elements influence it. Social influences have been an increasingly researched field of study in linguistics, beginning with a focus on the L1 environment. Labov (1972) discovered that aspects of the L1, such as pronunciation, are often modified based on who the interlocutor is speaking with and in what social group they are in. Milroy (1980), a researcher in the field of sociolinguistics, also looked at social groups in the L1 and posited that these groups have an observable effect on language, in that the closer one’s social ties are to the local community, the more vernacular speech an individual uses. Milroy coined the phrase social networks to refer to the informal social relationships that an individual contracts. This phrase will be used throughout our study.

These studies in the L1 are suggestive that the L2 is also affected by the surrounding social environment, and research has confirmed that the social networks of L2 learners influence
various aspects of second language acquisition, including language use and proficiency. Dewey et al. (2014) surveyed a large pool of study abroad participants to determine if a connection existed between social networks and language use. They found that “social network size was a positive predictor for out-of-class hours [of language use]” (p. 53), meaning that higher amounts of language use were correlated with larger social networks. Additional research performed by Fraser (2002) support a positive relationship between social networks and L2 language use, and her findings show that having both leads to increased proficiency in the L2.

Study abroad programs, defined here as an international experience involving in- and out-of-class language learning (Freed, 1995), capitalize on the benefits of interaction within social networks. These programs often advertise themselves as “a short cut to linguistic fluency” (Wilkinson, 1998); it is assumed that because participants are immersed in the target language, developing friendships and making contact with native-speakers is a natural occurrence while abroad. Although SA has the potential to provide many opportunities to interact with local speakers, the social and linguistic intricacies of the second language cause many learners to struggle in their L2 communication (Mendelson, 2004). Many students begin a SA experience with high hopes of linguistic benefits, yet often return home frustrated and disappointed with their lack of language gains. Although many factors could contribute to this, a lack of social networks and thus limited L2 interaction has been suggested (Wilkinson, 1998; DeKeyser, 2010).

Several challenges have been identified that cause SA students to struggle to develop social networks. Factors that inhibit social network development may include certain personality types, not having enough time with L2 speakers, gender differences, difficulty fitting in, finding it hard to make friends, remaining within L1 social groups, and having limited opportunities to interact with local speakers (Dewey, Ring, Gardner, & Belnap, 2013; Ring, Gardner, & Dewey,
2013; Baker-Smemoe, Dewey, Bown, & Martinsen, 2014). The sheer amount and variety of challenges that students must confront can be daunting and demotivating.

Many programs acknowledge the intimidating task of social network development, and have made great efforts to facilitate social interaction between students and native speakers throughout the duration of the study abroad. They have created opportunities to help students engage with the locals, through a study buddy or tutoring program, organized social activities, direct enrollment for classes with native speakers, introductions to clubs, teams and other social circles, implementation of an L2 language pledge, or through encouraging interaction with the community through volunteer work or community clubs (Ring et al., 2013; Dewey, Bown, & Eggett, 2012).

Despite the well-organized program interventions that enhance the overall SA experience (Trentman, 2012; Vande Berg, Connor-Linton, & Paige, 2009), the students themselves must be actively engaged in creating a positive experience and communicating in the L2 with those around them. The multiplicity of individual differences makes it impossible for one program to meet every learners’ needs. Bown et al. points out the important responsibilities that each student has, stating that “the learners themselves must regulate their own learning and the learning environment, inasmuch as the sociohistorical context allows them to” (p. 216). Lantolf and Pavlenko (2001) also target learner responsibility, writing that students are agents who “actively engage in constructing the terms and conditions of their own learning” (p. 145). Therefore, it is not enough to create a well-designed program and expect the students to benefit; students must take charge of their own learning, especially when it comes to overcoming obstacles to social network development.

In order to take learning into their own hands and excel, language learners need to possess the ability to self-regulate. Self-regulation refers to the processes that individuals utilize to manage their emotions, thoughts, and behaviors effectively. In regards to academic
achievement, it is present in making plans, setting goals, self-evaluating personal progress, and implementing different strategies. Self-regulation helps language learners experience greater academic success (Zimmerman, 1990), learn the target language faster, more effectively and enjoyably, and face the anxiety and complex challenges that are involved in the process (Oxford, 2011; Wen-Ta Tseng, Dörnyei, & Schmitt, 2006; Ortega, 2013). Macaro (2001) states that it is these types of proactive learners that seem to learn best from their language experiences.

Within the context of language learning and SA, self-regulation strategies have been used by students to enhance their social network development, even when high-quality program interventions exist (Belnap et al., 2015). An example of this is seen in research done by Bown, Dewey, and Belnap (2013), who looked at how learners of Arabic studying abroad in Jordan used self-regulation to monitor their actions and engage in strategies that lead to positive social networking experiences. They found that learners made L2 communication goals, engaged interlocutors by showing interest in them and asking quality questions, refused to switch to the L1 even if the native Arabic speaker did, and utilized pre-speaking techniques such as studying vocabulary along with topics of interest. These self-regulation techniques empowered the learners and aided them in creating successful social contacts while on their SA.

One specific tool of self-regulation that has the potential to help learners develop social networks is a combination of two different strategies, mental contrasting, and implementation intentions. The first technique, mental contrasting, is a self-regulation strategy created by Gabriele Oettingen (2000). It involves visualizing a future wish or goal, and then contrasting that goal with the obstacles of the present. Visualizing a future wish, accompanied by contrasted reflections on reality, is a mental exercise that stimulates the necessity to act (Oettingen et al., 2009). The second strategy, implementation intentions, takes the form of if-then statements (“if X occurs, then I will put plan Y into action”) and helps individuals react positively to real challenges they had imagined prior to their actual occurrence (Gollwitzer & Sheeran, 2006).
Combining mental contrasting and implementation intentions further reinforces the association between the goal and obstacles that learners have (Oettingen & Cachia, 2016). This combined strategy, mental contrasting with implementation intentions (MCII), is also sometimes referred to by the acronym WOOP, which stands for wish, outcome, obstacle, and plan.

MCII has been shown to be a very effective behavior-changing strategy among a wide range of ages, ethnic backgrounds, and situations (Oettingen & Cachia, 2016). Research has shown that individuals who use MCII have been able to enhance their health through more physical activity (Marquardt, Oettingen, Gollwitzer, Sheeran, & Liepert, 2017), change eating habits (Loy, Wieber, Gollwitzer, & Oettingen, 2016), improve relationships (Houssais, Oettingen, & Mayer, 2013), get better at time management abilities (Oettingen, Kappes, Barry, Guttenberg, & Gollwitzer, 2015), and improve in a host of other areas (see http://woopmylife.org/further/).

The positive findings from utilizing MCII in a plethora of areas suggest that this strategy would also be beneficial in social network development during SA. MCII in SA is a relatively new area of study, but some research has been done that encourages further investigation. K. Belnap (personal communication, March 29, 2018) taught MCII to Arabic speaking study abroad students during a semester in Jordan in 2017. He reported that several students praised this strategy because it led to them having the confidence to talk to native speakers, having patience with the culture, and staying motivated to continue practicing Arabic. One student reported that this technique really helped him see past certain aspects of the culture he didn’t understand or appreciate and to ultimately love the people and culture more (B. Stimpson, personal communication, April 13, 2018).

In Lee et al. (2018), 84 ELLs in an intensive English program in the United States (43 treatment, 41 control) were involved in a study which evaluated the impact of MCII on students’ English-speaking social networks. All of the students took a social network survey before and
after the 14-week semester. Results report that students who utilized this self-regulation technique significantly outperformed non MCII users in areas of durability (frequency of English use) and dispersion (the number of social groups one belongs to), although no significant difference was found in density (the number of friends within one social group), social network size (number of friends) or intensity (closeness of the relationship). This is the only known study of MCII and L2 social networks to date.

The present study seeks to increase our understanding of how MCII can promote social networks among L2 learners on SA in an intensive English program. Our research questions are as follows:

1. Are there significant differences in the social network development of those taught MCII (treatment) and those not taught (control)?
2. Among those taught MCII, are there significant differences in the social network development of students in their first semester of the program (new students) versus returning students?
3. How do the students perceive MCII in regards to helping them to develop their social networks?

**Method**

**Participants**

One-hundred and seven English language learners (55 males, 52 females) participated fully in this study. Results from 29 other students had to be discarded due to lack of initial or final survey data, which stemmed from program drop-out, absences, and level-changes. All participants were English language learners at the same intensive English program (IEP) in the United States. On average, students at this IEP study for 2-3 semesters before moving back to their home country or pursuing a degree from a university in the United States. Students had a wide variety of first
language backgrounds, including Spanish (59%), Portuguese (15%), Chinese (14%), Korean (3%), Japanese (2%), and Burmese, Malagasy, Russian, Turkman, Mongolian, and Berber Languages (each comprising 1%). The students ranged in age from 18 to 56 (median 24), and had roughly anywhere from intermediate to advanced English abilities according to the ACTFL proficiency guidelines (https://www.actfl.org/publications/guidelines-and-manuals/actfl-proficiency-guidelines-2012).

Materials

Data on the participants’ English-speaking social networks were collected through the Study Abroad Social Interaction Questionnaire (SASIQ), and students’ perceptions of MCII were measured using a brief survey. Qualitative insights about attitudes towards this self-regulation strategy were obtained from students’ responses to weekly writing prompts. Each of these instruments is described in further detail below.¹

SASIQ

This questionnaire was originally created by Dewey and colleagues (Dewey et al., 2012; Dewey, Belnap, et al., 2013; Dewey, Ring, Gardner, & Belnap, 2013) and has been used in a number of studies to measure social networks; it is based on the Montreal Index of Linguistic Integration (Segalowitz & Ryder, 2006). This questionnaire has been used to determine the size, durability, intensity, density, and dispersion of learners’ social networks (Dewey et al. 2014; Baker-Smemoe, Dewey, & Bown, 2014). Size refers to the number of friends a learner interacts with, and was measured by asking learners to list the names of their English-speaking friends (up to

¹ All materials can be obtained electronically by contacting the author at hannah.trimble29@gmail.com
15). Durability measures the frequency of interaction with an individual, by asking participants to indicate how often they spoke English with each of the individuals they had listed. Five options were available: never, rarely, sometimes, often, and very often. Intensity, or the closeness of the relationship, was determined through use of a Likert scale that ranged from acquaintance to very-close friend, which was numerically represented from 1 to 8. Density refers to the number of connections within a social group. Lastly, Dispersion measures the number of social groups that an individual belongs to, such as school, church, roommates, work, etc. The original survey questions were adapted to the English level of the participants, mainly through simplification of the instructions. For example, part of the original wording for one of the survey items was the following, “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).” After simplifying the language, the item simply stated, “Do your friends know each other? If your friends know each other, click and drag their names into the same box.”

**MCII Survey**

The MCII Survey (see Appendix) contained six questions designed to assess the students’ perceptions towards MCII and the degree to which they implemented the technique. Students responded to each question using a six-point Likert scale, ranging from strongly disagree to strongly agree.

**MCII Writing Prompts**

In addition to quantitative measures, qualitative data were gathered from the participants via responses to weekly writing prompts. The prompts targeted different aspects of social network development and MCII, such as goal-setting, foreseeing obstacles, actual obstacles, and making a
plan. The following questions were included, all of which were repeated at least twice over the course of the 14-week semester. “What WOOP social interaction goal do you have this week?”, “What is an outcome you expect from speaking English with other people?”, “What is an obstacle that stops you from interacting with others in English? Remember, the obstacle needs to be in your control”, “What is your plan to overcome this obstacle?”, and “How did using WOOP help your social interaction last week?”

**Design**

The treatment and control groups were formed among four different proficiency levels, each level having both a control and treatment class. In other words, there were a total of eight classes; four made up the control group and four the treatment. Care was taken to ensure that both of the classes within each level were taught by the same instructor to mitigate possible teacher variables, and all classes were focused on writing skill development. Overall, there were a total of 47 students in the control group, and 60 in the treatment.

**Procedures and Analyses**

The SASIQ was administered to all participants near the beginning of the course (during the second week) and was administered again during the last week of classes. The SASIQ was the same for all participants. Due to the large variance in the number of friends that the participants listed, only the three highest-rated friends (in terms of intensity) were averaged to calculate intensity. Durability was coded numerically from 0 (never) to 4 (very often). After data were collected from the pre- and post-SASIQs, all participants’ changes in social network measures were calculated. We then conducted a two-way ANCOVA on these overall changes, controlling for the pre-SASIQ scores. In addition, post-hoc Tukey tests were run in order for us to see the interaction effect of new versus returning students.
All students in the treatment group took the MCII Survey immediately following the post-SASIQ. These responses were numerically coded from 1 to 6 for statistical analyses, 1 being strongly disagree and 6 being strongly agree (the other options were disagree, somewhat disagree, somewhat agree, and agree).

MCII instruction was given to the four treatment classes on a day following the administration of the pre-SASIQ. The presentation focused on the benefits of social networks (e.g. linguistic, emotional, etc.), and a clear application of MCII was delivered using materials that Oettingen created (http://woopmylife.org). These materials elicited each step of WOOP (wish, outcome, obstacle, plan) from the participants. The final step of Plan required an if-then statement. Students were encouraged to utilize MCII in their social network development throughout the semester.

It is important to note that all students in the intensive English program received some basic self-regulation training throughout the semester, such as how to be strategic learners, evaluate their efforts, and take care of themselves physically and mentally. This training was not done systematically across levels or teachers and was dependent on the instructors incorporating it into their classes.

After the initial MCII presentation, a writing exercise was done once a week within each of the treatment classes for the remainder of the semester. These weekly 10-minute, timed-writing tasks required students’ to respond to predetermined prompts that asked them to articulate their usage of MCII in regards to their social networks (see Materials section for list of prompts).

Responses to these writing tasks were read after looking at the average numbers reported on the MCII Survey. The written responses of students who, on average, rated MCII as positive (4 or higher) were read first to determine how their recorded experiences aligned with their overall survey rating (e.g. Did students record any experiences with MCII and social networks?)
If so, did students write about MCII as helpful or unhelpful?) Then, we read the responses of those who, on average, rated MCII as unhelpful (3 or lower), again looking for any specific mentions of MCII as being helpful or not in regards to social network development.

**Results**

**SASIQ Data**

The changes between the pre- and post-SASIQ for the control and treatment groups are reported in Table 1. The following differences discussed are not significant. Both groups have positive changes in the social network measures of durability (frequency of English use) and intensity (closeness of the relationship), although the MCII group has an overall larger change in both these variables. The control group has positive changes in density (number of friends within social groups), whereas the treatment group shows negative changes. Both groups show a decrease in size (number of friends) and dispersion (number of social groups) by the end of the semester, with the control group having a bigger negative change. The largest differences we see between these two groups are in measures of size and intensity. Although there are differences in durability, density, and dispersion, these are much smaller.

It is important to point out that there exists a significant interaction effect among the variables of size and intensity, and a nearly significant interaction effect in density. Table 2 shows the changes between the pre- and post-SASIQ for the new and returning students within the MCII group. On average, the new students who utilized MCII significantly out-gained the returning students in terms of size, intensity, and density of social networks (changes in density were nearing significance). Among these three variables, the largest difference between new and returning MCII participants can be seen in size, where the new students reported having nearly two more friends at the end of the semester than they started with, whereas returning students lost two friends.
Based on our data, we begin to answer our first two research questions. Our first question asks if there is a significant difference in the social network measures between the MCII treatment group and the control group. At first glance, there are no significant differences in social network measures between them, although intensity is nearing significance. However, since there is a significant interaction effect in size, intensity, and density between new and returning students and the MCII versus control groups, we must look beyond the main effect data in Table 1, and focus instead on the estimated differences for these groups found in Table 2.

Table 1

<table>
<thead>
<tr>
<th>SN Measure</th>
<th>Estimated Change</th>
<th>SE</th>
<th>Partial Eta-Squared</th>
<th>p</th>
<th>95% CI</th>
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<tr>
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</table>

Note. SN = social network; CI = confidence interval; LL = lower limit, UL = upper limit; *significant interaction effect; p<0.05 **nearly significant interaction effect; p=0.086
Table 2

Estimated Differences from Pre- to Post-SASIQ: MCII New vs. Returning Students

<table>
<thead>
<tr>
<th>SN Measure</th>
<th>Estimated Change</th>
<th>SE</th>
<th>Partial Eta-Squared (Effect Size)</th>
<th>p</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
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<td>LL</td>
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<td></td>
<td></td>
<td></td>
<td>UL</td>
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<tr>
<td>MCII Size</td>
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<tr>
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<td>1.285</td>
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<td>1.274</td>
<td></td>
<td>1.000</td>
<td>-3.380</td>
</tr>
<tr>
<td>Control R</td>
<td>-0.456</td>
<td></td>
<td></td>
<td></td>
<td>3.273</td>
</tr>
<tr>
<td>MCII Durability</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>New</td>
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<td>0.217</td>
<td>0.000</td>
<td>0.952</td>
<td>-0.680</td>
</tr>
<tr>
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<td>0.451</td>
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<tr>
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<tr>
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<td>0.243</td>
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<td>0.994</td>
<td>-0.0572</td>
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</tr>
<tr>
<td>New</td>
<td>1.257</td>
<td>0.328</td>
<td>0.085</td>
<td>0.001</td>
<td>0.401</td>
</tr>
<tr>
<td>Returning</td>
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<td></td>
<td></td>
<td>2.113</td>
</tr>
<tr>
<td>Control Intensity</td>
<td></td>
<td></td>
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<tr>
<td>Control New</td>
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<td>0.361</td>
<td></td>
<td>0.988</td>
<td>-0.824</td>
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<tr>
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<td></td>
<td></td>
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<td>1.059</td>
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<tr>
<td>MCII Density</td>
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<tr>
<td>New</td>
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<td>0.534</td>
<td>0.016</td>
<td>0.118</td>
<td>-0.196</td>
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<tr>
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<td></td>
<td>2.599</td>
</tr>
<tr>
<td>Control Density</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control New</td>
<td>-0.192</td>
<td>0.600</td>
<td></td>
<td>0.989</td>
<td>-1.761</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td>1.378</td>
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<tr>
<td>MCII Dispersion</td>
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<tr>
<td>New</td>
<td>0.484</td>
<td>0.344</td>
<td>0.010</td>
<td>0.497</td>
<td>-0.414</td>
</tr>
<tr>
<td>Returning</td>
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<td></td>
<td></td>
<td></td>
<td>1.382</td>
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<tr>
<td>Control Dispersion</td>
<td></td>
<td></td>
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<tr>
<td>Control New</td>
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<td>0.378</td>
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<td>1.000</td>
<td>-0.947</td>
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<tr>
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<td>-0.089</td>
<td></td>
<td></td>
<td></td>
<td>1.028</td>
</tr>
<tr>
<td></td>
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</tr>
</tbody>
</table>

Note. SN = social network; CI = confidence interval; LL = lower limit, UL = upper limit; R = returning student; N = new student

Our second research question asks if new and returning students within the MCII treatment group have significantly different social network measures. In response to this, we see that the social network measures of size and intensity show that the new students significantly outgained the returning students. New students also showed nearly significant gains in density.
MCII Survey & Writing Prompts

We used both the MCII Survey and responses from the weekly writing prompts to evaluate the students’ perceptions toward this self-regulation technique. First, the six Likert scale statements about MCII gave us quantitative insights concerning the students’ attitudes and perceptions toward their implementation of MCII. Table 3 shows the percentages of students who agreed or disagreed to each Likert scale question. These questions were as follows: 1. WOOP helped me to meet more English-speakers (native and nonnative), 2. WOOP helped me to develop close English-speaking friends, 3. WOOP helped me to overcome my obstacles to speaking English with people, 4. WOOP helped me to speak more English, 5. I will continue using WOOP to make social goals, and 6. I used WOOP every week. For example, in response to the first question, “WOOP helped me to meet more English-speakers (native and nonnative)”, 69% of all students indicated some degree of agreement, whether that was somewhat agree, agree, or strongly agree. Looking at each of the six questions, we see that the majority of students agreed to at least some extent on each of the statements, suggesting relatively wide support for the use of MCII related to social network formation.

Table 3
Percentage of MCII Students Indicating Degree of Agreement to MCII Survey Questions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Meet People</th>
<th>Close Friends</th>
<th>Overcome Obstacles</th>
<th>Speak More</th>
<th>Continue WOOP</th>
<th>Used Weekly</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Agree</td>
<td>69</td>
<td>67</td>
<td>73</td>
<td>71</td>
<td>69</td>
<td>69</td>
</tr>
<tr>
<td>% Disagree</td>
<td>31</td>
<td>33</td>
<td>27</td>
<td>29</td>
<td>31</td>
<td>31</td>
</tr>
</tbody>
</table>

We used the qualitative data from the MCII Survey as a guide to organize the students’ written responses. After averaging the six responses of each student to the Likert scale questions, we looked at the writing responses of those who had, on average, expressed some degree of
agreement to the MCII Survey questions (a score of 4 of higher). Many of these participants’ entries narrated specific stories about how MCII had greatly helped them with their social networks. Among those students who, on average, disagreed with the MCII statements (an average rating of 3 or less across the six survey questions), we found that they generally wrote shorter responses to the prompts, but these weren’t generally negative. In fact, many of the responses didn’t directly answer the prompt itself, not allowing us to determine either a positive or negative response.

These qualitative insights helped us to triangulate the data and understand the attitudes towards, and implementation of MCII by students. They also assisted us in interpreting the quantitative data we received from the SASIQ and the MCII Survey. Overall, it appears that the students have a positive view of MCII, and consider it to be helpful in their social network development.

**Discussion**

The purpose of this study was to explore the impact of MCII on learners’ social networks in general, as well as to examine the impact it had on students enrolled in their first semester of the program versus returning students. Differences between the control and treatment groups were minimal, but when looking at the interaction effect of new and returning students who utilized MCII, we found significant differences. Our qualitative data provide additional insights into students’ attitudes toward this strategy. What follows is a discussion of the differences between the treatment and control group, MCII new and returning students, and a closer look at participants’ perceptions of MCII according to our quantitative and qualitative data.
Social Network Measures

Size. When we look at the overall changes in the size of social networks (number of friends) between the treatment and control group, we see only minor differences. However, because of the significant interaction effect ($p=0.019$), we must look beyond these numbers in order to see what is happening with the groups. Within the control group, there is not a significant difference between the new and returning students. Examining size within the MCII group, we find that new students reported having 2.0 more friends than they started the semester with. Returning students reported a loss of nearly the same number, -2.0. Contrasting these two groups, we see a significant difference of nearly four friends. The fact that the new students, but not the returning, reported ending the semester with more friends is congruent with other studies that have been done. Research has shown that new students are more prone to have high points of L2 contact early on in their SA, but as time goes by, they experience a drop in this number (McManus, Mitchell, & Tracy-Ventura, 2014). In other words, newly arrived students are constantly meeting new people and expanding their social circles, but as the months pass, these students reduce the number of people they stay in contact with. This may be due to time constraints, personality differences, etc. This is what we saw within the MCII group; new students increased their social networks and returning students experienced a decline.

Although new students may be more likely to develop greater social networks during their first semester of SA, the barriers to social network development may often be too overwhelming to confront, thus reducing the chance of developing new friendships. Without the same self-regulation tools as their counterparts, new students within the control group of our study reported a drop of -0.45 in their social network size by the end of their first semester. When contrasting these results with those of new MCII students, we see a nearly significant difference of -2.44 ($p=0.086$). Although variables such as personality or gender could be
Contributors to this difference, it is probable that using MCII self-regulation had a large impact on the social network size of new students.

**Intensity.** Both the control and treatment group reported gains in intensity (closeness of the relationship) within their social networks. Since the interaction effect is significant, we again look at the differences between the new and returning students in both the control and treatment groups, found in Table 2. Within the control group, the new and returning students show no significant difference among themselves ($p=0.99$). In contrast, we find a significant difference between the MCII new and returning students ($p=0.00$), with returning students experiencing a slight decline in intensity (-.182), and new students reporting a much larger increase (1.076). In other words, new MCII students were the only group to show positive and significant gains in intensity over the course of the semester.

This data actually contradicts the patterns that other studies have found. Typically, SA participants have larger social networks at the beginning of the program, which then decrease in size but increase in intensity over time (Hillstrom, 2011; Granovetter, 1982). Although the returning MCII students did show a decrease in their social network size, which follows this pattern, the intensity of their relationships dropped, instead of increasing. On the other hand, new MCII students gained in both areas. Perhaps this difference between MCII students can be attributed to the fact that new MCII students more fully utilized the self-regulation strategy because it helped them to overcome acculturation challenges, which are typically present while adjusting to a new environment (Berry, 1990). It is possible that MCII assisted them throughout the various phases of acculturation (Burnett & Gardner, 2006), therefore helping them to establish larger and closer social relationships.

High-hopes for native speaker interaction often accompany language learners at the beginning of SA, but as time goes on, a student may experience a reality contrary to their initial
expectations for success and become discouraged. Perhaps this is the case with the MCII returning students in our study, who had already made attempts to build their social networks during their first semester of the program, but became frustrated with a lack of progress and did not see how MCII might address their concerns. Also, MCII instruction was not specifically targeted to the difficulties that returning students might face, so it is possible the technique was not as energetically implemented because it did not seem as relevant to the returning students. The significant difference between MCII new and returning students suggests that such a strategy may be most beneficial when it is implemented at the onset of a SA program.

Students that have close relationships during SA can benefit linguistically, socially, and emotionally. To illustrate, intensity has been shown to be a predictor of language proficiency gains in several studies (Dewey, Belnap, and Hillstrom, 2013; Baker-Smemoe et al., 2014), possibly because closer friendships often lead to a greater degree of social and linguistic opportunities than mere acquaintances. For example, deeper relationships often involve language that moves beyond small talk and into more complex structures. In addition to linguistic benefits, these friendships allow learners to feel integrated with the L2 culture and socially supported, feel higher motivation to learn the language, experience enhanced attitudes toward the culture, and experience a sense of increased well-being (Dörnyei, 2003; Isabelli-Garcia, 2006; Scott, 2017). All of these aspects are important for SA participants and it is our hope that implementing MCII at the beginning of SA will make it much more likely for students to experience them.

**Durability.** Differences in durability (frequency of English use) between the groups show that the MCII participants spoke with people in their social networks slightly more than did the control group, although the difference was not significant. The difference between the MCII new and returning students was also minor. The fact that the frequency of interaction was so small for all participants could be due to the fact that the average pre-SASIQ scores for this variable were
already quite high (3.05 or *often*), so there was little room for growth (4, or *most often*, was the highest possible response for this variable). Perhaps if the Likert scale had included more than just five options, we could have measured more subtle changes in durability.

In contrast with our study, Lee et al. (2018) found that students in the MCII treatment group reported significantly more English use than did the control group. It is possible that the implementation of MCII in this study was targeted more towards increasing language use with pre-existing social groups, whereas students in our study were directed to focus more on finding new friends and strengthening those relationships.

In Dewey, Belnap, and Hillstrom (2013), the SASIQ asked students to evaluate how much of their L2 (Arabic) they spoke with locals, as well as how much of their L1 (English) they used with the same people. This was done with the purpose to see how often a social relationship was activated, regardless of language. Even though students did speak English with their Arab friends, they spoke Arabic more often. Future studies using MCII to evaluate social networks could consider asking these two separate questions of learners as well, in order to measure interaction in more than one language.

*Density and dispersion.* The change in density (size of the social groups) on the post-SASIQ tended to be rather small for both the control and treatment group. Since the interaction effect is nearly significant, we again look at Table 2 to see where the differences lie. There is no significant difference between the new and returning students within the control group. On the other hand, the new and returning students in the MCII group show a nearly significant difference in changes, with the new students having an average of 1.2 more friends per social group.

Perhaps this increase in density for the MCII new students was one of the causes of their overall network size increase; through existing friendship groups these learners met new people
and made more friends. Research has found that pre-existing social groups are often an avenue where new connections are formed (Jackson & Rogers, 2007). It can be uncomfortable to leave the comfort zone of known friends to create new ones, but through MCII instruction, learners form and visualize a plan for how they will push past trepidation in order to achieve their goals.

Neither the control nor treatment group showed significant changes in dispersion (number of social groups). Likewise, the changes in dispersion between MCII new and returning students are quite minor and not significant.

The minimal change across the board for all participants could be a result of students having a limited number of places to form new friendship groups. Although students were in four English classes a day, their classmates remained the same. Furthermore, it is unlikely that many students would change their living arrangements mid-semester, meaning they would be with the same roommates and/or neighbors the entire 14 weeks. The lack of social group growth we see in our study could be due more to the environment than the individual students.

**MCII Survey and Writing Prompts**

While quantitative data can help us visualize overall trends in our study, it is through qualitative data that we gain a more comprehensive picture of what learners were thinking and feeling about MCII during the 14-week semester (Kinginger, 2009; Dewey, Belnap, Hillstrom, 2013). First, we will look at the MCII Survey responses of learners who, on average, didn’t agree that MCII was helpful (an average rating of 1, 2, or 3), followed by the entries and a discussion of those who agreed that the strategy was helpful (an average rating of 4, 5, or 6 on the MCII Survey).

Some of the students who reported that MCII was not helpful to them explicitly pointed this out in their writing prompts, simply saying, “It does not help” “It helped me but not that much really”, and “There is no obstacle. I use my poor vocabulary and other skills that I already learned. My plan is to continue doing that.” Another student expressed his lack of enthusiasm
about the writing prompts themselves, saying, “I'm kinda tired of answer the same question over and over.” However, we did notice that several students who had disagreed to the survey responses actually had positive things to say about MCII within their social interaction. These students said, “Because of woop, I talked to others more”, “Wood helped me to have some goals nad [sic] interact with people”, and “WOOP Social Interaction Goal: I had a great experience talking to a friend who is stduying [sic] the same career that I want to pursue” Another student elaborated on her social interaction goal, “My social interaction [goal] this week will be participate in activities with people that only speak English, and to speak the most possible in English even when my friends that speak Spanish.” Perhaps the discrepancy between their survey responses and their written responses stemmed from misinterpreting the survey scale, not making the connection between the survey and what they had done in class with MCII, or misremembering the utility of the technique they had seen in the earlier weeks of the semester. Another factor could be that although the students wrote about their social interaction every week, and mentioned positive experiences, they ultimately didn’t feel like it made a large difference.

Students who, on average, agreed to the MCII Likert questions often described specific experiences with MCII in their responses to the writing prompts, depicting how the technique had helped them overcome fear, remember their social interaction goals, and take advantage of social network opportunities. One student remarked, “Through WOOP [MCII] I could recognize the obstacles that stop the way I interact with others. I could understand my weakness and think in solutions to resolve that situation.” Another student wrote, “Woop help me a lot for improve myself and also for improve my english... last week...I went to Idaho with my [friends] and I remember WOOP and I said okay I need to practice the ideas that I wrote in woop. So i feel a little nervios [sic] but I try to speak every moment and try to communicate with other people.” One participant said, “Woop helped me SO much. I completed all my goals and all that I wanted
to say I said! I went to church on Sunday and …. I talked to a lot of different people about different subjects and that was pretty cool. I will continue to set goals and try to complete all them.” These positive statements line up well with the results reported on the MCII Survey; none of the students who agreed to the statements recorded negative experiences.

There were several student responses that never directly addressed social networks, even though the prompt solicited that information from them. For example, in response to the prompt, “What WOOP social interaction goal do you have this week?”, a student responded, “I am nervous and excited in the same time because we have elc concert on tuesday 31. This will be my first time singing here.” Another student wrote, “My goal this week is study more write, read, speaking and listening because I will have quizz [sic], tests and I would like better and improve my grades.” Although the students seemed to remember the steps of MCII, they appeared to either forget the social-interaction focus, choose to use MCII to pursue other language goals, or perhaps get tired of answering the same prompt and instead write about something else entirely.

Limitations and Suggestions for Future Research

One major limitation of this study is the use of self-report data. Self-report data are notorious for being inaccurate, yet with something as complex as measuring social networks, they are often utilized in efforts to capture students’ perceptions and social interaction trends. Using both quantitative and qualitative sources helped us to triangulate the data, thus giving us a more complete understanding of students’ experiences with MCII. Having additional ways to capture social network trends, such as through interviews or speaking with the participants’ friends, would be a way to capture further insights. For instance, following a handful of students and interviewing them every week could provide a more in-depth look at how students incorporate MCII into their social interaction goals, challenges, and successes.
The main purpose of the writing prompts was to remind students of MCII and help them implement it within their social networks by asking them about their goals, obstacles, desired outcomes, and plans. However, for research purposes, more focused writing prompts could have led to more detailed feedback from the students. Specific questions about the instrument itself could have resulted in more informative data (i.e. Is WOOP something you use day to day? Why or why not? Do you think it is a helpful tool to help you talk to new people? Did you have a specific experience talking to someone in English because you used WOOP? What was your experience?) Future studies could change these weekly writing prompts, and also include one or two open-ended questions in the final MCII Survey that ask students to reflect on their overall social network experience during the semester and how MCII did or didn’t impact it.

Conclusion

This study looked at the impact that mental contrasting with implementation intentions had on English language learners’ social networks, and found that those students who were new to the program and utilized MCII experienced the most social network gains, especially in terms of size (number of friends) and intensity (closeness of the relationship). Although MCII positively impacted new students’ social networks the most, the majority of MCII participants reported that this self-regulation technique helped them to meet more English-speakers, speak more English, develop closer relationships, and overcome obstacles to forming social networks. Insights from students’ written responses showed us that students often had positive social network experiences due to utilization of MCII, while others claimed it had no impact. Although more research is needed, our quantitative and qualitative findings support MCII as a worthwhile self-regulatory tool to consider in helping learners build their social networks while abroad. Given the apparent potential of MCII for promoting language use and social interaction, research focusing on MCII in other aspects of language learning also seems in order.
References


Appendix

Likert Scale MCII Statements

Instructions: Please select how much you agree or disagree with each statement. Options include strongly disagree, disagree, somewhat disagree, somewhat agree, agree, and strongly agree.

1. “WOOP helped me to meet more English-speakers (native and nonnative)”
2. “WOOP helped me to develop close English-speaking friends”
3. “WOOP helped me to overcome my obstacles to speaking English with people”
4. “WOOP helped me to speak more English”
5. “I will continue using WOOP to make social goals”
6. “I used WOOP every week”
The Study Abroad Social Interaction Questionnaire (SASIQ)

Q1 What is your name (first and last name)?
________________________________________________________________

Q2

<table>
<thead>
<tr>
<th>DAYS</th>
<th>MONTHS</th>
<th>YEARS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How long have you been in the United States?

Q3 How many English speaking friends do you have right now in Utah? They can be native or non-native speakers.

These people could be...
...people you sometimes, often, or always speak English with.
...roommates, classmates, coworkers, or people your friends introduced you to.

Write a number.
________________________________________________________________

Q4 You just answered the previous question with a number. Use that same number to fill out the names of your English-speaking friends. For example, if you wrote 6 friends, you will fill out 6 spaces below.

In the boxes below, please write the names of friends or acquaintances you speak English with here in Utah. If you cannot remember the person's name, choose a word to describe them!
Q5 Please use the drop-down boxes to indicate how often you speak English with each individual (English Use).

<table>
<thead>
<tr>
<th>Person</th>
<th>Very Often (5)</th>
<th>Often (4)</th>
<th>Sometimes (3)</th>
<th>Rarely (2)</th>
<th>Never (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person 1</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Q6 On average, how much time did you speak English with each person every week? Use hours and minutes

<table>
<thead>
<tr>
<th>HOURS (1)</th>
<th>MINUTES (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   Person 1 (x1)

   Total

Q7 Use the drop-down box on the left to indicate the category that best describes how you met each person.

<table>
<thead>
<tr>
<th>How we met</th>
<th>Host Family/Roommate (1)</th>
<th>Through an ELC Program (2)</th>
<th>Through Another Friend (3)</th>
<th>I First Spoke to Them Somewhere Else (4)</th>
<th>They Spoke to Me First Somewhere Else (5)</th>
<th>Mission (6)</th>
<th>Other (7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q8 For each of the people in your list, please indicate the level of your friendship. **Acquaintances** might be people you speak to about everyday topics such as weather, sports, or television shows. You may not know them very well.

**Friends** might be people you'd speak to about topics of deeper interest, such as opinions on politics, religion, current events, etc.

**Very close friends/confidants** might be people you'd speak to about deep personal beliefs, or someone you would ask for advice about personal matters.

<table>
<thead>
<tr>
<th>Person 1 ( )</th>
<th>Person 2 ( )</th>
</tr>
</thead>
</table>

Q9 Choose 3 people from your list above that have the **highest** score. These 3 people are your closest friends. Answer this question:
Why do you have a strong relationship with these 3 people?

________________________________________________________________
________________________________________________________________
________________________________________________________________

Q10 Choose 3 people from your list above that have the lowest score, which means they are NOT close friends. Answer this question:

Why do you NOT have a stronger friendship with these people?

________________________________________________________________
________________________________________________________________
________________________________________________________________

Q11
Do your friends know each other? If your friends know each other, click and drag their names into the same box. The box shows HOW they know each other.

Write the title of the group in the next question. This helps us understand how your friends know each other.

If people belong to more than one group, place them in their primary group. A primary group means their main group.

<table>
<thead>
<tr>
<th>Roommate</th>
<th>ELC Friend</th>
<th>Church Friend</th>
<th>Coworker</th>
<th>Group 5?</th>
<th>Group 6?</th>
</tr>
</thead>
<tbody>
<tr>
<td>_____Person 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q12 Part B

- Label for Group 5 (1) ________________________________
- Label for Group 6 (2) ________________________________