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Mental Contrasting with Implementation Intentions as Applied to Motivation in L2 Vocabulary Acquisition

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ABSTRACT

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Mental Contrasting with Implementation Intentions (MCII) is a self-regulation method shown to increase goal achievement through a combination of positive visualization and planning to overcome anticipated obstacles, specifically in time management, physical fitness, smoking cessation, dieting, social interaction, and classroom performance (Duckworth et al. 2013; Oettingen & Reininger 2016). Because second language (L2) acquisition is highly influenced by learner motivation, this study investigated whether MCII could be applied to motivation to acquire L2 vocabulary in beginning Arabic classes. A control group was compared to two treatment groups, one receiving vision-oriented MCII training that asked them to recall what first motivated them to begin language study when facing lack of motivation and a second receiving action-oriented MCII training encouraging participants to create an action-based plan when facing lack of motivation. Motivation levels of all participants were tracked through a survey of student motivation given at the beginning and end of the semester as well as through shortened weekly surveys tracking motivation level and L2 vocabulary acquisition over time.

The results of this study showed that while there was no statistically significant motivational gain in any one group, there were several level items that revealed statistical significance within and between groups. No significant differences were found between groups in terms of motivation development, but raw averages of student motivation levels pre and post MCII training show that more participants in the vision-oriented groups saw motivational gains than those in the action-oriented group. Additionally, qualitative student comments revealed that many participants had failed to incorporate their MCII plans into their study regularly. This consequently may have limited the impact of MCII. Additional qualitative comments by students who did incorporate MCII suggest that they felt positively about MCII and believed it benefited their motivation and vocabulary acquisition. Consequently, additional research in which greater participation and more active use of MCII are promoted and qualitative data such as student journals and post interviews of students utilizing MCII are recommended to further understand the effectiveness or ineffectiveness of MCII as applied to learner motivation level.

Keywords: MCII, L2 acquisition, motivation, WOOP

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Introduction

Motivation is an important part of second language (L2) acquisition. Acquiring a new target language is often difficult and filled with many challenges. High motivation levels can help students persevere when faced with obstacles that may otherwise impede, or halt, their learning progress (Gardner & Lambert 1959). Studies have shown that students with higher levels of motivation are often able to reach higher levels of academic achievement (Dörnyei & Ushioda, 2001). Unfortunately, research has also shown that student motivation tends to decrease over the course of a semester (Cheng & Lee, 2018), and that more advanced language courses typically correlate with lower student enrollment (Dupuy, 2000; Grittner, 1968).

Self-regulation is a process that helps learners manage their thoughts, feelings, and emotions in order to better achieve their goals (Zimmerman, 1990). Self-regulation in education is important because students with higher levels of self-regulation have the ability to better persevere through periods of low motivation that might otherwise cause students to halt their educational pursuits (Sasaki et. al, 2018). Motivation is dynamic in nature and ebbs and flows over time (Dörnyei, 2005). Educational aims that require long term goal pursuits, such as second language acquisition, require that students be able to persevere during periods of low motivation in order to ultimately achieve goal attainment. Increasing self-regulation is one way for learners to also help maintain their motivation over time in order to maintain goal striving on their path to goal achievement.

Mental Contrasting with Implementation Intentions (MCII) is a self-regulation method that has been shown to alter behaviors to increase goal achievement. MCII does this through a combination of positive visualization and planning to overcome anticipated obstacles (Oettingen 2012; Oettingen & Reininger, 2016). While MCII has been successfully applied to many other

fields including time management (Oettingen et al. 2015), health goals (Mutter et al. 2019; Marquardt et al. 2017; Oettingen & Reininger 2016), social interaction and classroom performance (Duckworth et al., 2013), it has not yet been widely applied to L2 acquisition with the exception of recent research applying MCII to language learning social networks (Brown, 2021) and reducing speaking anxiety among language learners (Chien, 2020).

This study seeks to determine the effects of MCII as applied to motivation to learn L2 vocabulary by examining 3 sections of Arabic learners over the course of a semester. It compares a control group to two treatment groups to determine whether MCII can help students maintain or increase motivation to learn L2 vocabulary over the course of a semester. It also seeks to determine whether higher levels of motivation correlate with higher vocabulary proficiency and whether participants perceived any benefits from applying MCII.

Review of Literature

Self-Regulation

Self-regulation is a process by which individuals can better manage their thoughts, emotions and behaviors in order to obtain higher levels of goal achievement (Bandura, 1991; Zimmerman, 1990). Self-regulation is essential to productive language learning because it allows individuals to engage actively during their own learning (Dörnyei et al. 2015; Zimmerman, 1990). Some self-regulatory strategies include setting intermediary goals while pursuing long-term goals, engaging in regular self-evaluations, asking for more information when needed, and adapting when negative feedback is received (Bandura, 1988; Zimmerman 1990). Learners that practice self-regulation are not only more likely to have higher levels of academic success, but they are also more likely to view their future with higher levels of optimism (Zimmerman, 2000).

Self-regulated learners possess meta-awareness of what they know and will actively strive to fill gaps in their knowledge (Zimmerman, 1990). Though there has been a plethora of research on the various aspects that comprise self-regulation, generally speaking, these aspects can be combined into three categories: metacognition, motivation, and behavioral response (Zimmerman, 1990; Senovska et. al, 2020). Examples of metacognitive self-regulation would include goal setting, self-evaluation, and self-monitoring during goal striving. Another strategy is to try and adjust the mind's cognitive state through the use of imagery in order to help remember or compare various circumstances, or to try and reduce stress (Boekaerts, et. al, 2005). These metacognitive strategies are then complimented by motivation, which helps the individual maintain goal focus over a period of time. Behavioral responses then help the individual compensate for knowledge or resource gaps by allowing the individual to seek additional help and resources, for example, by going to a library to find supplemental material, asking questions when material is not understood, or spending additional time to practice difficult concepts (Zimmerman, 1990).

Applying self-regulatory strategies to L2 acquisition has been shown to help increase individuals' motivation levels as they strive to obtain self-set goals (Sasaki et. al, 2018). One way this is accomplished is when learners utilize self-regulatory tools such as self-evaluation. Self-evaluation allows learners to identify progress made as well as current deficits preventing goal attainment (Zimmerman 1990). Huang, Zhang, and Broniarczyk (2012) found that learners' mental representations of their progress towards goal attainment is an additional self-regulation method that can help increase motivation to persevere during goal striving. They discovered that learners who focused on an exaggerated level of goal progress when further from goal achievement are more likely to persevere in goal strivings because it allows the learner to

perceive progress towards the intended goal, thus helping the learner to believe that the intended goal is attainable. Then, as learners move closer to goal attainment, those that downplay their perceived goal progress are able to stimulate greater motivation to increase goal striving because of the perceived discrepancy between reality and goal attainment (Huang et. al, 2012, Sharif & Woolley 2020).

Recognizing current deficits between reality and goal attainment can increase goal striving and increase motivation by sparking greater desire to close the gap between reality and the hoped-for goal (Oettingen, 2000). Additional self-regulatory tools can then be used, such as setting short term goals or adjusting study patterns to adjust the learner's trajectory in such a way that will help them close this perceived gap between reality and goal attainment.

This close correlation between self-regulation and motivation would also suggest that these two concepts are linked. Zimmerman (1990) even posited that motivation and learning are interdependently tied together when examined under the lens of self-regulation. Given that second language acquisition often occurs over a long period of time, higher levels of motivation and self-regulation are needed to carry learners through difficult periods of the acquisition process. Motivation helps learners continue to reach for their intended goal, and self-regulation helps learners remain aware of their position on their path towards goal attainment. This, in turn, helps lead to a reduction in goal abandonment because when motivation levels wane, learners are able to fall back on self-regulatory tools in order to help them remain motivated or to reinvigorate motivation in order to once again progress towards goal achievement.

In a recent study by Le-Thi and colleagues (2020), both motivational self-regulatory strategies and cognitive self-regulatory strategies focusing on visualization were used in the classroom in an attempt to increase students' vocabulary acquisition. Motivational strategies

included ideas such as establishing a strong rapport between students and teachers, having students set specific goals for mastering formulaic sequences in each lesson, having students write down their commitments to their goals, reminding students of their strengths, and encouraging learning through competition style games. Visionary self-regulatory strategies included training on the possible benefits of visualization, having students imagine their future selves utilizing the lessons they are learning, having students record their emotional reactions following their visualization, and reminding students of obstacles that their future selves may encounter on their way to their goal success. Though both the groups utilizing self-regulatory tools showed significant gains in comparison to the control group, the group utilizing visionary self-regulatory strategies seemed to be more effective in helping students increase their vocabulary acquisition than the group using motivational self-regulatory strategies.

Because self-regulation and motivation seem to be interconnected, it would be expected that as a learner achieved higher levels of self-regulation, that they would also see an increase of motivation. A deeper discussion of motivation and how it affects L2 acquisition will now follow.

Motivation

Motivation is an influential variable in second language (L2) acquisition (Li & Pan 2009). High levels of learner motivation can help learners overcome significant obstacles in their L2 goals, including lack of resources and lower cognitive ability (Dörnyei, 2005; Gardner & Lambert, 1959).

Early studies of motivation found that motivation was a multifaceted variable (Dörnyei & Otto, 1998) that was typically goal-directed and included aspects such as integrativeness, learning environment, and learner attitude (Dörnyei, 1994). Additional research integrated motivation with the theory of action control (Kuhl, 1985; Dörnyei & Otto, 1998) and the theory

of possible selves (Markus & Nurius, 1986) which allowed further study of the various aspects of motivation and how they interrelate.

The theory of action control (Kuhl, 1985) indicates that there are multiple steps to goal achievement and in order for goal achievement to be successful, an individual will have to overcome alternative options that could distract from goal achievement. These options could come in the form of other goals that may appear more desirable in the short term, or they could be circumstances, either internal or external, that dissuade an individual from continuing to pursue the set goal. This theory allowed researchers to better understand the dynamic nature of motivation by demonstrating that motivation is not a singular event, but rather a dynamic state that, because of its fluctuation, can affect decision making over time as individuals attempt to cope with competing demands and motives as they work towards goal attainment or decide to abandon their initial goal. Brunstein and Olbrich demonstrated this in their 1985 study in which they asked participants to complete a task, but then repeatedly interrupted them or introduced obstacles that would prevent the task completion. They found they could group participants into two categories, action oriented and state oriented. Action-oriented participants were better able to self-regulate and were more likely to attribute failure to external factors, and less likely to become frustrated and decrease in motivation. Conversely, state-oriented individuals were more likely to become frustrated with each interruption, and attribute failure to internal factors. This caused these individuals to lose motivation which further affected their performance the next time an obstacle was introduced. This study not only helps demonstrate how external factors can affect motivation, but how motivation can change over time (Dörnyei & Otto, 1998) when influenced by both external and internal factors, such as repeated interruptions and whether an individual is action or state oriented. When coupled with the theory of possible selves, it is

possible to better understand not only that motivation is changing over time, but what aspects of motivation are changing.

The theory of possible selves examines how intrinsic and extrinsic desires and pressures can influence an individual's motivation. Individual's motivation is influenced as language learners consider future versions of themselves. Dörnyei and colleagues (2005) applied the theory of possible selves to L2 acquisition by separating these versions into two overarching categories, the ideal-self, and the ought-to-self. In addition, they also examined the learner experience (Dörnyei & Otto, 1998).

As the label suggests, the ideal-self is the way that the L2 learner envisions themselves in an ideal world. This may include speaking fluently for business or pleasure abroad, succeeding in an academic class, or a number of additional goals that the learner views as desirable. The ideal-self also helps incorporate ideals of integration with the target language and culture since it often includes visualization of fluent interaction using the target language (Dörnyei, 2005; Ruesch et al. 2011).

The ought-to self, in contrast, is the way that the L2 learner processes the external factors that are pressuring them to pursue their L2. This could be pressure from a parent, the need to fill an academic requirement, gain experience for better employment, or any other number of external factors that make the learner feel that they 'ought-to' continue their study.

Lastly, the learner experience takes into account situated aspects of motivation (Dörnyei, 2005), including factors such as learner environment, availability of classes, quality of educators, and learning resources (Dörnyei & Ryan, 2015). This approach to learning is known as the L2 motivational self-system. It has been used in multiple studies world-wide with great success to help better understand the similarities and differences in motivation orientation of individuals

and communities. For example, studies using the L2 motivational self-system have shown that the ideal-self was a significant factor affecting learner effort in a group of Korean college students (Kong et al., 2018) as well as a group of Saudi EFL students (Alshahrani, 2016). However, the Korean students were influenced more by learner attitude (Kong et al., 2018), while the Saudi students were influenced more by learner experience (Alshahrani, 2016). Studies such as these can help identify motivational trends and commonalities between groups, while also helping to identify differences specific to that particular demographic or individual. These findings can then be considered when creating curriculum or considering how to best help students better acquire their target L2 language.

Because higher motivation is correlated with higher academic performance (Dörnyei & Ushioda, 2001), having a better understanding of motivation orientation can also potentially help educators and learners know how to best focus their efforts to stem demotivation. A recent study by Xaypanya, Ismail, and Low (2017) found that one significant cause of demotivation among EFL learners in Lao PDR was lack of resources such as lack of textbooks or modern teaching aids and poor teaching methods. Though not the only cause of demotivation among PDR students, the lack of resources is a factor that could potentially be resolved to help increase motivation and L2 acquisition success.

Additionally, studies using the L2 motivational self-system can help identify other demotivating factors as well, such as language anxiety. A study by Papi (2010) found that Iranian high school students' English anxiety was decreased by the L2 ideal self and L2 learning experience but was substantially increased by the L2 ought-to-self. Identifying the cause of increased English anxiety then allows for the creation of a targeted response to help combat the specifics of that anxiety.

Because motivation plays such a large role in L2 acquisition, and because it is not uncommon for motivation to wane over time (Campbell & Storch, 2011), especially in L2 classes, this study seeks to determine if this loss of motivation might be stemmed by the application of MCII.

MCII

MCII is a two-part self-regulation technique that involves mental contrasting followed by implementation intentions. The first portion of MCII is mental contrasting which is a cognitive self-regulation strategy that was created by Gabriel Oettingen (2000). Mental contrasting is affected by an individual's self-efficacy. This self-efficacy can be composed of an individual's belief in their ability to succeed as well as affected by past experiences and outcomes, vicarious experiences, or other affected states (Oettingen, 2000). Mental contrasting works by having an individual visualize a desired future, or goal, and then contrasting that with the individuals' current impending reality (Oettingen, 2012). This contrast can help spark motivation for goal striving as the gap between the desired future and impending reality is realized (Oettingen, 2000). This contrast can also help individuals recognize when a goal may be unrealistic so that individuals might adapt the goal or choose to abandon it (Oettingen, Schnetter, & Pak, 2001).

Contrasting the difference between where individuals currently are, and where they want to be, has been shown to help associate the future and present (Oettingen et al., 2015). This helps increase motivation in those who believe they will be successful in achieving the goal, leading to more intense goal striving (Duckworth et al. 2011) This contrast also helps individuals set realistic goals, or reevaluate existing goals that may be unattainable (Oettingen et al., 2001); Wittleder et al., 2019).

Following mental contrasting with implementation intentions has been shown to help individuals adjust behavior and achieve higher levels of goal attainment (Duckworth et al., 2011). Implementation intentions are applied by identifying an obstacle that will prevent goal attainment and then creating an if-then statement that will help overcome this obstacle when it is faced in reality (Oettingen et al., 2015).

MCII is also recognized by the acronym WOOP. WOOP stands for wish, outcome, obstacle and plan and incorporates all the steps of mental contrasting with implementation intentions. In order to complete WOOP, participants follow four easy steps. The first step of WOOP is to elaborate a wish that one hopes to accomplish. This wish should be something that is achievable over a period of several weeks but that will also push the individual to grow as they strive to meet their selected objective. Following the selection of their wish, participants focus on the wish outcome. This includes positive visualization of achieving the intended wish and imagining in as much detail as possible what the participant may feel in the moment of accomplishment. This could include details such as where the success will occur, who else may be present, how it will feel emotionally, and any other details pertinent to the successful fulfillment of the wish. Next, participants contrast their positive outcome with their current reality by identifying an obstacle or set of obstacles impeding their progress towards their desired outcome. The participant visualizes this obstacle in detail, thinking about when it occurs, how it feels, and how it impedes their goal striving. Finally, once an obstacle has been defined the participant creates a plan to overcome the obstacle they have identified. This plan should then be followed when the anticipated obstacle arises. (See http://woopmylife.org).

This process of contrasting a desired future with an obstacle in one's current reality is thought to allow people to more clearly identify the gap between where they are, where they

want to be, and what is keeping them from getting there. Identifying this gap can then spark greater motivation in participants as they seek to narrow the gap by creating a specific plan that will help them overcome the obstacles they are facing on their way to goal achievement.

Implementing intentions following mental contrasting has been shown to greatly increase goal achievement within many different fields (Oettingen et al., 2015). MCII interventions in healthcare not only showed success in reducing harmful habits such as smoking (Mutter et al., 2019) and high-risk drinking (Wittleder et al., 2019), but also demonstrated success in creating lifestyle changes in post-stroke patients such as increased daily activity (Marquardt et al., 2017). Such success suggests effectiveness not only in minimizing negative habits, but in also building positive habits.

Additional studies of MCII in educational interventions found that at risk students who implemented MCII saw an increase in grades and a reduction of tardiness and negative behavior as reported by parents and educators (Duckworth et al., 2013).

When applied to working mothers who were also attending a vocational business program, MCII was influential in helping participants to attend class more regularly and improve their day to daytime management skills (Oettingen et al., 2015).

The results of these studies and the variation of each discipline suggest that not only that MCII be applied successfully in an L2 acquisition application, but that there is potential for many of the same gains. Furthermore, because of the ease and transferability of MCII (Boekaerts, 1999), L2 students could apply this self-regulation technique not only within their individual classes, but throughout their lives as they continue striving to achieve acquisition goals both in, and out of the classroom.

The adaptable nature of MCII also makes it ideal for the longitudinal nature of L2 acquisition. A 2016 study by Oettingen and Reininger found that the use of MCII allowed participants to better adapt rather than abandon goals. Contrasting the positive outcome of their goals with their current reality allowed participants to determine the feasibility of their current goals and adjust goals and plans as necessary.

MCII has also been shown to protect an individual's sense of self and competence when they receive negative feedback (Oettingen & Kappes, 2009), which in turn allows for increased meta-awareness of progress towards goal outcomes. Because there is a great deal of correction that occurs in the L2 acquisition process, MCII could be a useful tool to help learners positively process that correction. One example of this can be seen in the qualitative comments in a 2019 study by Brown. Though one student had previously struggled with speaking their target language, they recognized that they were making progress and consequently continued actively pursuing additional opportunities to speak. They said,

> 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 oaky 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. (p. 22)

This shows not only a meta-awareness of their knowledge gap, but also how their self-evaluation and use of MCII as a learning strategy helped them continue to progress towards goal achievement despite previous struggles and nervousness.

Successful utilization of MCII, as applied to L2 acquisition, has the potential to lead to increased student achievement, as well as establish routines that may continue to help language fluency improve long after the initial class has been completed.

While MCII has successfully helped individuals have greater levels of goal achievement across many other fields, the application of MCII to various aspects of L2 acquisition is still fairly new, though not entirely untested. A recent study by Brown and Lee (2018) found that study abroad participants who utilized MCII created larger, though not statistically significant, social networks with locals than the control group. Additionally, when examining qualitative data Brown et al. (2021) found that the use of MCII helped participants better identify obstacles, set goals and speak their target language more frequently. MCII has also been applied to language learner anxiety and found to help decrease speaking anxiety (Chien, 2020). In addition, qualitative data from Mencarelli (2020) recently found that the use of MCII helped international students increase their self-regulation, focus on IEP goals, and become more aware of their progress towards goal achievement. The data in these studies suggest that additional application of MCII to L2 acquisition is not only timely, but that MCII could prove an excellent tool in other aspects of L2 acquisition as well, such as motivation to learn L2 vocabulary.

This study seeks to target motivation to learn L2 vocabulary by applying MCII through a program created by Gabriele Oettingen known as W.O.O.P. (Wish. Outcome. Obstacle. Plan). WOOP follows the same steps as MCII by asking participants to set an individualized goal or wish related to the target goal, then visualize the positive outcomes of achieving that goal in as much detail as possible. Participants will then contrast the positive outcomes with anticipated obstacles that they may encounter that will prevent them from achieving their wish. Following this contrast, they will create a plan to help them face these obstacles as they arise. This often takes the form of an if-then statement eg: if I lose motivation to study vocabulary, then I will...When anticipated obstacles do arise, participants then enact the plan they have created to help overcome these obstacles (Oettingen & Kappes, 2009; see http://woopmylife.org).

Vocabulary

Though MCII could have been applied to any number of language tasks, this study has chosen to focus on motivation to acquire L2 vocabulary. This focus was chosen partially because establishing a robust L2 vocabulary is essential to the success of L2 acquisition, but also because to this point, there has been little research focusing on the application of MCII applied to learner motivation to acquire L2 vocabulary.

Acquisition of L2 vocabulary is an essential part of language learning. Studies have found that for L2 learners to avoid gaps in understanding they need to comprehend between 90-98% of the vocabulary in books, newspapers, etc. (Nation, 2006; Salah, 2008). Additionally, L2 speakers need to be able to understand 95% of lexical items in conversations to avoid a gap in comprehension (Zeeland & Schmitt, 2013).

A number of variables affect vocabulary acquisition, including learner engagement. Learner engagement implies an underlying current of motivation that helps drive learners to engage with the L2 vocabulary in order to move them closer to their acquisition goals. One form of engagement includes using known vocabulary to learn additional vocabulary through the use of context clues when reading, listening to music or watching television in their target language. This engagement strategy can not only help learners gain a word's definition, but also helps them gain a deeper understanding of the language form, grammar, and syntactic usage (Salah, 2008; Webb et al., 2018). Additionally, when learners use context clues to engage with materials in their target language, they are typically able to retain the words they gain for longer periods of time (Hatami, 2017).

Additional forms of learner engagement include activities such as practicing vocabulary words in communicative tasks or comparing vocabulary words to determine which best fits the

correct usage of the ideas learners are trying to convey. A 2020 study by Le-Thi and colleagues found that utilizing such engagement strategies such as using vocabulary in communicative tasks, or comparing them to determine their appropriateness, can help learners gain a deeper understanding of vocabulary tokens during the acquisition of the token vocabulary word. Additionally, it has been found that higher levels of learner involvement often tend to correlate to greater vocabulary gains (Huang et. al, 2012). Learner involvement can come in many forms, among them, engaging with authentic texts, practicing communicative tasks with new vocabulary words, or seeking out new vocabulary words in order to better communicate ideas through speaking or writing. This level of involvement often involves the self-regulatory tool of self-evaluation. Highly involved students can self-evaluate and recognize gaps in their vocabulary in either spoken or written form. Recognizing these gaps then can lead them to additional study, outside inquiry from a teacher or mentor, and additional practice in an attempt to close these gaps (Huang et. al, 2012).

Research has shown that there is a link between vocabulary acquisition and learner motivation. Higher levels of intrinsic motivation are positive predictors of a greater vocabulary size (Tanaka, 2017). Research has shown that when students are given feedback on their vocabulary acquisition through test and quiz scores, they have an increase in positive attitude and increased motivation to study (Tanaka, 2018).

Vocabulary acquisition is also positively influenced by learner self-regulation (Chen et al., 2019). A recent study by Le-Thi and colleagues (2020) also found that when vocabulary instruction was paired with either motivational self-regulation strategies or visionary self-regulation techniques, that higher levels of vocabulary acquisition were achieved. As noted previously, motivational strategies included having an established rapport with the professor and

other students, writing goals down and expressing commitments, taking part in group competition games, and recalling strengths from previous successes. Visionary strategies included having students imagine their future selves conducting an interaction, recording an emotional reaction caused by their use of visualization, visualizing successful role models with similar backgrounds, and reminding themselves of obstacles that future selves may encounter. Le-Thi and colleagues found that both groups outperformed the control group and that the group utilizing visionary strategies outperformed the motivational strategy group).

Le-Thi's (2020) study is of particular interest because it shows how two different aspects of self-regulation (motivation and visionary strategies) are utilized to achieve increased progress towards goal attainment. This study is also of interest because it shows how some self-regulation strategies may be more effective than others. One of the posited hypotheses presented by Le-Thi and colleagues was that the visionary strategies seemed safer and were more easily engaged in by participants. Another influencing factor was that these visualized self-images could be tied to past experiences that were concrete (2020). Additionally, while neither group of participants utilized MCII, both groups had aspects of goal setting, and visualization either looking forward to the ideal-self or looking back to self-evaluate progress that had been made. It is possible that this looking forward and looking back, though not exactly the same as the usage of MCII, served to similarly identify progress or needed progress gaps that helped energize participants and increase goal striving in a way similar to MCII.

Interestingly, while Le-Thi and colleagues found that visionary self-regulation strategies were more effective than motivational self-regulation strategies, a 2001 study by Oettingen and colleagues seemed to suggest that positive visualization alone was not enough to spur participants to goal achievement. Positive visualization alone caused participants to engage in

positive indulging, in which they indulged in positive fantasies of goal achievement, but consequently failed to spark increased goal striving. Positive indulgence was also found to increase discouragement among participants because goal progress was less likely despite positive visualization. That same study also found that reversing the order of mental contrasting and first envisioning reality and then envisioning the hoped-for future also was more likely to cause positive indulging rather than increased goal striving.

In contrast, mental contrasting increased goal striving and made goal achievement more probable (Oettingen et. al, 2001). Additional research found that when mental contrasting was paired with implementation intentions, not only did goal striving increase, but the likelihood that participants would achieve their anticipated goals also increased significantly (Oettingen et. al, 2015).

Additionally, Gollwitzer (1993) found that forming intentions helped participants commit to their goals. Implementing intentions not only allowed participants to focus on a specific goal but connected the goal direction with specific actions or behaviors that could be implemented in specific situations. This typically occurs in the form of an if-then statement and is utilized to help participants create and execute plans to overcome anticipated obstacles on their path to goal achievement.

The act of not only forming a specific intention but creating a plan of action that can be implemented when anticipated obstacles arise, allows the memory to store this information and initiate the planned behavior more quickly when faced with the anticipated situation in reality. This in turn increases the likelihood of success in overcoming the anticipated obstacle on the road to goal achievement (Gollwitzer, 1993).

Additionally, when goal commitment is high, the use of implementation intentions also helps reduce cognitive load when the anticipated situation or obstacle arises (Gollwitzer, 2006). This is especially important when goal timelines are shorter or motivation and cognitive resources are needed for other things because it allows the participant to dedicate cognitive resources and focus to other aspects of goal progress.

These studies would suggest that the likelihood of goal achievement is greater when participants not only have a goal intention and can perceive the distance between their current state and the goal, but when they are also able to create a plan of action to help them overcome the perceived gap. However, as Li-Thi and colleagues found, vision-oriented strategies also seem productive in helping participants advance towards goal progress and attainment.

Because other self-regulation techniques have yielded positive results in the past, the application of MCII which is also a self-regulation technique, presents a promising opportunity for potential gains that will further benefit students in their acquisition goals.

This study seeks to determine whether the application of MCII can benefit students in increasing or maintaining their motivation to achieve their second language vocabulary goals over the course of the semester. It also seeks to determine if utilizing MCII with a vision-oriented focus is more or less productive than utilizing MCII with an action-oriented focus.

In examining MCII with both vision and action-oriented foci, this study seeks to answer the following research questions:

1. Can the use of MCII positively affect, or help maintain learner motivation to acquire greater L2 vocabulary proficiency?
2. If MCII does help learners maintain, or increase, motivation to learn L2 vocabulary over the course of the semester, will students in the treatment groups

show marked improvement, or significant gains in vocabulary proficiency in comparison to the control group?

3. Will students who utilize MCII throughout the semester perceive a benefit from its application? Were there experiences in which they found applying MCII more effective than others?

Methodology

Participants

Participants of this study comprised 3 classes of 102 L2 Arabic classes at Brigham Young University. Eleven participants were male and twelve were female for a total of twenty-three participants between ages 18-30 as available by enrollment. Group one had eleven students, two males and nine females; group two had seven students: four males and three females; group three had five students which were all males. Each section was randomly assigned a study role, with group 1 functioning as the control group, and groups 2 and 3 functioning as treatment groups referred to as vision-oriented (VO) and action-oriented (AO) respectively. All classes followed the same curriculum.

Materials

Data was collected using two questionnaires (see Appendices A & B): The Motivation Orientation Questionnaire (MOQ) and the Weekly Motivation Measure. Qualitative data were also collected following the introduction of MCII to the two treatment groups. These data were obtained by including several additional questions about participants' perception of MCII at the end of the Weekly Motivation Measure that was administered to the two treatment groups.

MOQ

The MOQ was a sixty-four-question survey split among four sections. Section one collected basic information such as the student's class section, whether another language had already been learned, and what additional languages, if any, were spoken by the students.

Section two included a baseline motivation measure by asking students how motivated they felt at the time of the survey, prior to vocabulary study that week, following vocabulary study that week, and prior to vocabulary quizzes.

Section three focused on participants' perception towards L2 vocabulary by including in this instrument an adapted survey based on Tanaka's Self-Regulating Capacity in Vocabulary Learning scale (SRCvoc) (Tanaka, 2017). The adapted SRCvoc examined self-regulation strategies applied to vocabulary acquisition. Questions from the SRCvoc were used as originally presented with the exception that not all questions were used. This was done in an attempt to limit the total amount of questions on the MOQ and help reduce survey abandonment. Because self-regulation strategies, particularly MCII, are affected by an individuals' expectations of success, questions that were selected for the MOQ focused on self-reported perceived self-efficacy and learner attitudes about vocabulary.

Also included in this instrument was an adapted survey from a conglomerate of motivation surveys by Dörnyei & Ushioda as well as Taguchi, Magid and Papi as used in a comparative survey project in the countries of Japan, China, and Iran (2009). These surveys were used to evaluate various aspects of motivation orientation such as the L2 selves, linguistic confidence, attitudes towards the target language, ethnocentrism, learning experience, language anxiety, instrumentality, and other language learning characteristics across regions of the three aforementioned countries.

Questions from these surveys were adapted by presenting them in the English language as well as changing the target language to Arabic to fit the study. Not all questions from these surveys were used in order to dissuade participants from survey abandonment. Additionally, some statements surrounding ethnocentrism and assimilation were initially administered in areas of the world in which nationalism, and cultural and religious differences may have had a larger effect on the motivation or orientation of the participants' view towards the target language. For example, participants learning a target language that was once used by an invading country may have stronger orientations against ideas of ethnocentrism and assimilation as opposed to participants learning a target language of another country nearby but that has not, in recent history, invaded the participants' country. So, while some questions of ethnocentrism were retained for the MOQ, not as many were selected. Some examples of statements selected for the MOQ are shown in Table 1. (See Appendix A for complete survey)

Questions from section one were open ended, allowing participants to fill in the appropriate answers. Sections two, three, and four used a six-point Likert scale measuring from strongly disagree to strongly agree in order to measure participants' motivation level, attitudes towards vocabulary and motivation orientation.

Table 1

MOQ Survey Sample Questions

Orientation Category	Statement
Motivation Measure	I felt motivated before studying vocabulary this week
Motivation Measure	feel motivated before quizzes and exams.
Vocabulary	When I feel stressed about vocabulary learning, I know how to reduce this stress
Vocabulary	Vocabulary acquisition is an important part of speaking Arabic
Vocabulary	I enjoy learning new vocabulary words
Ideal-Self	I can imagine myself speaking Arabic as if I were a native speaker of Arabic
Ought-to Self	I study Arabic because close friends of mine think it is important or want me to.
Instrumentality	Studying Arabic can be important to me because I think it will someday be useful in getting a good job
Linguistic Self-Confidence	I am sure I have a good ability to learn Arabic.
Linguistic Self-Confidence	I believe that I will be capable of reading and understanding most texts in Arabic if I keep studying it.
Anxiety	I get nervous and confused when I am speaking in my Arabic class.
Assimilation	I want to become similar to the people who speak Arabic.
Ethnocentrism	I feel it is important to learn Arabic in order to understand more about the culture and art of its speakers.

Note: Complete survey can be found in the appendix.

Weekly Motivation Measure

The Weekly Motivation Measure used a six-point Likert scale, from strongly disagree to strongly agree, to measure participant motivation over time (See appendix B for full survey). Participants were asked to determine to what extent they felt motivated before and after taking a vocabulary quiz and before and after study throughout the previous week.

This questionnaire also included a five-question vocabulary test to track participants' vocabulary proficiency. Vocabulary selections were made from Al-Kitaab fii Taᶜallum al-ᶜArabiyya3rd Edition (Brustad et al, 2011), the textbook being used by the BYU Arabic program. Class curriculum closely followed the selected text and vocabulary quiz words were selected to correspond with the current chapters being studied.

Within Al-Kitaab, each chapter begins with a list of approximately 30 vocabulary words. These words were subsequently defined and then incorporated into class activities and homework assignments meant to help students integrate vocabulary meaningfully into various aspects of language acquisition including speaking, listening, and reading. The current curriculum accomplished this in a number of ways including in and out of class listening exercises. These exercises asked students to listen to native speakers and then respond to comprehension questions. Students were also asked to listen to and transcribe Arabic sentences that incorporated vocabulary from the chapter. Additionally, speaking practice in class was focused on topics that helped incorporate that chapter's vocabulary words. Students were also able to practice reading vocabulary words from primary source documents in the target language such as newspaper articles, an educational department directory, and other sources that a student may encounter outside the classroom that included words they were learning as well as words that they had not yet learned.

While there are many ways to measure vocabulary proficiency, including through writing samples or use of vocabulary in speaking, this study examined student recognition of form and meaning through the use of a five-question multiple choice survey. This was done in part for ease of administration and to reduce the required amount of time necessary to complete the vocabulary quiz. This was also done to reduce survey abandonment and maintain student

willingness to continue taking quizzes in the future, especially since students would be completing this quiz on their own and outside of class.

Each vocabulary quiz consisted of five words chosen at random from the chapter that was being studied during the time the quiz was being administered. The quiz was to be taken outside of class and no grade or credit was given for the completion of the quiz. It was administered via Qualtrics survey with a word presented in Arabic and four multiple choice options presented below. Students were asked to select the English word from the four options that represented the Arabic word shown in the prompt. When scoring these quizzes, one point was assigned for correctly defined words and 0 points were given for incorrectly defined words with a possible total score of five out of five.

Additional questions were added to the Weekly Motivation Measure of the two treatment groups following MCII training to obtain data regarding participants' perceptions of MCII and its effectiveness. The Control group's Weekly Motivation Measure did not have these questions. The following questions were added to the treatment group Weekly Motivation Measure:

1. Do you feel that applying WOOP has helped you *maintain* motivation to study vocabulary this week?
2. How has WOOP has helped you *maintain* motivation to study vocabulary this week?
3. Do you feel that applying WOOP has *increased* your motivation to study vocabulary this week?
4. How has applying WOOP *increased* your motivation to study vocabulary this week?
5. Do you feel that applying WOOP has increased your Arabic vocabulary proficiency?
6. Did you do WOOP this week on your own?
7. How many times did you do WOOP this week?

If a participant indicated that WOOP helped them, they were asked to respond to open-ended questions asking for additional information about how WOOP helped them. If a participant indicated that WOOP did not help them, skip logic was applied in Qualtrics to advance participants to the next applicable question.

Though not all participants chose to respond to all survey questions, the responses of each individual participant who did respond were averaged to determine their perception for each level item. Percentages were then calculated using the average perception of each participant. These questions were adapted from similar studies of MCII as applied to other L2 tasks such as improving learners' social networks (Brown et al., 2021). However, unlike Brown's use of a Likert scale when attempting to elicit perceptions about MCII, this study elected to combine yes or no response questions with additional open-ended questions to allow longer participant responses.

Procedure

Because MCII has been investigated across multiple fields, this study sought to utilize similar methodology as previous studies that implemented WOOP in health (Marquardt et al, 2017), academic goal pursuit among grade children (Gawrilow et al, 2013; Gollwitzer et al, 2011) and so forth. These methodologies generally involve focusing on a particular goal outcome which all groups, control, and treatment, are trying to meet. MCII is then taught to the treatment group that ideally utilizes that training in their goal striving. Following some time, results of all groups are measured, and the results of the control and treatment group are compared. Notably, in several studies, more than one treatment group is compared with the control group. This was the case in the 2017 study performed by Marquardt and colleagues in which they sought to examine physical activity and weight loss of stroke survivors. Marquardt and colleagues

examined a group with an unstructured information condition, a group with a structured information condition and a group with a structured information condition + MCII. They then compared the results of all three of these groups. The current study sought to do the same by comparing a control group that would receive no MCII training with two treatment groups- one which received MCII training with a vision-oriented focus and one which received MCII training with an action-oriented focus. Treatment details about each group will follow shortly.

All groups, including the control group, received a presentation at the beginning of the semester detailing the importance of motivation and vocabulary acquisition.

The Weekly Motivation Measure was administered regularly (approximately once a week throughout the semester) to all groups over the course of the study. It contained a short vocabulary quiz and asked for a self-reported measure of participant motivation at various times throughout the week including during study, after study, pre-quiz, and post-quiz.

Following midterms, the control group received an additional presentation on the importance of motivation and vocabulary acquisition. The two treatment groups received MCII training with the VO group having a vision-oriented focus plan and the AO group having an action-oriented plan. All groups continued to take the Weekly Motivation Measure. Two questions were added to the Weekly Motivation Measure for the two treatment groups to request information about their perceptions and experiences utilizing MCII.

Treatment Group - Vision Oriented

The VO group received a presentation on the importance of motivation and vocabulary acquisition followed by an explanation of WOOP and how it helps participants overcome obstacles and achieve goals. VO group participants were given a WOOP worksheet and a WOOP session was administered in class (Please see appendix C for WOOP worksheet and instructions).

Because WOOP works best when there is goal ownership, each participant set an individual goal relating to Arabic vocabulary acquisition (Oettingen et al., 2005). This also allowed participants to specifically target their own vocabulary acquisition needs. Participants then envisioned their own personal outcomes and obstacles as directed by the WOOP training, taking time to visualize them and write them down in detail. Their plan was vision oriented and included an if, then statement that asked participants to recall their initial desire and motivation for studying Arabic. These statements would resemble the following:

"If I become discouraged/demotivated/don't want to study vocabulary etc. then I will pause to remember why I initially began studying Arabic."

Participants were then asked to implement this plan when discouraged and to repeat WOOP weekly or more regularly as needed over the course of the remainder of the semester.

Treatment Group - Action Oriented

The AO group also received a presentation on the importance of motivation and vocabulary acquisition followed by WOOP training that focused on an individually set vocabulary related goal. Unlike the VO group however, participants in the AO group were asked to create an action-oriented plan in order to overcome their anticipated obstacle(s). Like their vocabulary focused wish, their action plan was also individualized. Consequently, their if-then statements resemble the following: "If I become discouraged/demotivated/don't want to study vocabulary etc. then I will...individual action plan."

Like the VO group, participants in the AO group were also asked to implement this plan when discouraged, and to repeat WOOP weekly or more regularly as needed over the course of the remainder of the semester.

Analysis

The MOQ was administered to all groups both at the beginning and end of the study with the VO and AO groups receiving additional questions requesting information about their experience with WOOP. The Weekly Motivation Measure was administered regularly to all groups over the course of the semester.

It is important to note that there was not a group that received absolutely no treatment, in part because of low enrollment numbers, and in part because one of the objectives of this study was to measure motivation levels over the course of the semester which would have been difficult without a self-reported measurement as gathered in the Weekly Motivation Measure. Consequently, even the control group was made aware that this study was examining both their motivation level and their vocabulary progress.

It is possible that the Weekly Motivation Measure could have drawn awareness to learner motivation, even in the group that did not receive MCII training. However, because all groups would have that same awareness because all groups were taking the Weekly Motivation Measure, a significant effect from this awareness is not anticipated. Though, while it was not anticipated that this awareness would have a significant effect on participants' overall motivation, it is possible that the increased awareness may have reminded participants to try and remain more motivated over time, even if they had not received MCII training. This in turn could have affected some participants' motivation level. Attempts should be made to control for this variable in future studies.

Ten Weekly Motivation Measures were administered over the course of the study. However, because participation was voluntary and the vocabulary quiz portion of the survey was not graded, not all participants took all quizzes. Research question one asked, "Can the use of

MCII positively affect, or help maintain learner motivation to acquire greater L2 vocabulary proficiency?". This question was answered by averaging each participant's quiz scores both pre and post MCII training (or the 2nd presentation on vocabulary and motivation for the control group). These averages were then compared to determine any gains or losses of motivation that were made in each category. The average results from each student in their respective group were then averaged with the other students in their group to see the motivational gains and losses for the group as a whole. The groups were then compared to each other. This was done using an ANOVA with a Tukey-Kramer adjustment to determine adjusted *p* values and determine statistical significance. It is important to note that these averages were adjusted in order to better fit the linear regression model and account for variation in the number of responses received from each student. Consequently, data showing in Tables 2 and 3 represent estimated change pre to posttest using least squared means (LSM).

Table 2

Weekly Motivation Measure- Estimated Motivation Change Per Group

Motivation Measure	Estimated Change	SE	DF	t Value	Pr > |t|
Current motivation at time of survey					
Control	-0.17	0.37	12	-0.46	0.655
VO	0.96	0.56	12	1.7	0.115
AO	-1.55	0.72	12	-2.14	0.053
Following vocabulary quiz					
Control	-0.06	0.44	12	-0.13	0.900
VO	0.61	0.64	12	0.95	0.360
AO	-1.08	0.77	12	-1.41	0.183
During vocabulary study and practice					
Control	-0.61	0.30	12	-2.07	0.061
VO	0.31	0.44	12	0.69	0.501
AO	0.53	0.51	12	1.05	0.315
Following vocabulary study and practice					
Control	-0.20	0.36	12	-0.55	0.594
VO	0.52	0.55	12	0.94	0.363
AO	0.29	0.62	12	0.47	0.646
Vocabulary Quiz Score					
Control	-0.18	0.27	12	-0.66	0.522
VO	0.25	0.40	12	0.64	0.535
AO	0.25	0.47	12	0.54	0.597

Note. VO = vision-oriented; AO = action-oriented

Table 3

Weekly Motivation Measure- Motivation Level Difference Between Groups

Motivation Measure	Estimated Change	SE	DF	t Value	Adj p
Current motivation at time of survey					
Control, VO	-1.13	0.66	12	-1.7	0.244
Control, AO	1.38	0.84	12	1.66	0.261
VO, AO*	2.51	0.97	12	2.57	0.059
Following vocabulary quiz					
Control, VO	-0.66	0.78	12	-0.85	0.683
Control, AO	1.03	0.91	12	1.13	0.516
VO, AO	1.69	0.98	12	1.73	0.235
During vocabulary study and practice					
Control, VO	-0.92	0.54	12	-1.72	0.239
Control, AO	-1.15	0.59	12	-1.94	0.169
VO, AO	-0.23	0.67	12	-0.34	0.940
Following vocabulary study and practice					
Control, VO	-0.71	0.66	12	-1.08	0.542
Control, AO	-0.49	0.72	12	-0.68	0.778
VO, AO	0.22	0.83	12	0.27	0.961
Vocabulary Quiz Score					
Control, VO	-0.43	0.49	12	-0.88	0.664
Control, AO	-0.43	0.56	12	-0.77	0.727
VO, AO	0.00	0.60	12	0	1.000

Note. VO = vision-oriented; AO = action-oriented; *nearly significant interaction effect; p=0.0589

It is also important to note that while these adjusted values give a better overall representation of patterns that may be occurring in the data set as a whole, or making inferences of a larger population, descriptive statistics can be useful in summarizing data gathered in this study in an attempt to identify patterns that may emerge from the descriptive data. For this reason, the averages of participants' motivation levels and vocabulary quiz scores has been included along with applicable measures of variance (See Table 4).

Table 4

Weekly Motivation Measure Descriptive Data

Pre MCII /Post MCII	Mean of Motivation Prior to Quiz	Mean of Motivation Post Quiz	Mean of Motivation During Study	Mean of Motivation Post Study	Mean of Vocabulary Score
			Control		
Pre	3.56	3.76	3.70	3.67	4.36
Pre St. Dev	0.80	0.80	0.74	0.78	0.64
Pre Std. Error	0.24	0.24	0.22	0.23	0.19
Post	3.29	3.67	3.03	3.31	4.41
Post Std. Dev	1.41	1.30	1.03	1.17	0.94
Post Std. Error	0.47	0.43	0.34	0.39	0.31
			AO		
Pre	4.45	4.22	3.78	3.92	4.93
Pre St. Dev	0.97	0.70	1.39	1.43	0.15
Pre Std. Error	0.44	0.31	0.62	0.64	0.07
Post	3.33	3.25	4.00	3.83	4.83
Post St. Dev	2.25	2.05	1.89	1.88	0.14
Post Std. Error	1.30	1.18	1.09	1.08	0.08
			VO		
Pre	3.50	4.42	3.42	3.92	4.33
Pre St. Dev	0.84	1.28	0.66	1.11	1.17
Pre Std. Error	0.34	0.52	0.27	0.45	0.48
Post	3.87	4.43	3.53	4.07	4.77
Post St. Dev	0.90	0.91	1.07	1.16	0.22
Post Std. Error	0.40	0.41	0.48	0.52	0.10

Note: AO = Action-oriented, VO = Vision-oriented

Research question 2 asked, “If MCII does help learners maintain, or increase, motivation to learn L2 vocabulary over the course of the semester, will students in the treatment groups show marked improvement, or significant gains in vocabulary proficiency in comparison to the control group?”. This was answered using the same methodology as applied to research question one, when looking at vocabulary quiz scores pre and post MCII training, both for each individual student and for each group as a whole.

Research question 3 asked about the perception participants would have towards WOOP and if they would perceive a benefit from it. It also asked if there were experiences in which participants found applying MCII more effective than others. This question was answered using qualitative data which was generated using open ended questions that were added to the Weekly Motivation Measure following MCII training. These questions included items such as “How has WOOP helped you maintain motivation to study vocabulary this week?” and “Do you feel that applying WOOP has increased your Arabic vocabulary proficiency?” (See Appendix B).

These data were useful in better understanding participants’ perceptions about WOOP usage and its effectiveness in affecting motivation to learn L2 vocabulary because it helped better reveal the thoughts and feelings that participants were experiencing as they took part in the study.

These comments, in turn, may help better explain some of the data found in averages for each participant. For example, in this study, participant twelve experienced a drop of motivation level part way through the semester. When looking at qualitative comments they had made that same week, it was revealed that earlier that week participant twelve had decided to discontinue their study of Arabic. They further elaborated that because of this decision they were no longer

motivated to study Arabic and had stopped using WOOP. This information helped account for the drop in participant twelve's motivation level.

Additional participant comments were reviewed for patterns and insight about the participant perception about WOOP throughout the study and its perceived effectiveness on motivation to learn L2 vocabulary.

Results

Weekly Motivation Measure Data

This study sought to determine if MCII as applied to motivation to learn L2 vocabulary would produce a significant effect on participant motivation level and vocabulary proficiency over the course of the semester. The results of the pre and post Weekly Motivation Measure showed no statistically significant differences between the control or treatment groups on either vocabulary proficiency or motivation level changes. Motivational gains and losses from pre to post for the control and treatment groups are shown in Table 2. Table 3 compares the differences in these gains and losses between each group using the calculated Least Squared Means (LSM) of the pre/post scores found in Table 2.

While no differences proved to be statistically significant, several interesting patterns emerged when examining the motivational gains and losses of each group. The control group showed a loss in both vocabulary quiz scores as well as in motivation across all categories over the course of the study. Conversely, the VO group increased in both vocabulary quiz scores as well as motivation across all categories. The AO group also showed an increase in motivation but only when pertaining to their study practices and not in class either prior or post vocabulary quiz. The AO group did see an increase in vocabulary quiz scores despite their lack of motivation before and after quiz participation.

The first item of the Weekly Motivation Measure, asking for the participants' motivation in class prior to the vocabulary quiz, showed a difference between the VO and AO groups that was approaching significance ($p = 0.058$). Examination of motivational losses of each group's motivation prior to taking the vocabulary quiz revealed that the control and AO groups showed a loss of motivation over time with a -0.17 and -1.55 loss of motivation respectively. Unlike the previous two groups, the VO group actually showed a 0.96 increase in motivation from the beginning of the semester to the end.

In addition to the adjusted values for the Weekly Motivation Measure, an examination of mean motivation levels can provide an interesting look at motivational gains and losses over the course of the study (See Table 4). When examining means pre to post, both the control group and the AO group decreased in motivation over the course of the semester. The VO group increased in motivation, though the increase was small. Additionally, when individual averages are compared with qualitative comments, additional insight can potentially be gleaned to have a better qualitative understanding of how MCII affected individual learners.

Interestingly, two patterns emerged among qualitative responses that did give greater insight into the study's results. The first pattern was a pattern of nonresponse, and the second was a pattern of WOOP non-usage.

This study was not mandatory and there was no grade or incentive attached to the study participation beyond the hope that WOOP usage would increase their motivation and L2 vocabulary acquisition positively. While this hope was sufficient to induce participation from some, other students failed to participate in study surveys, or as was more frequently the case, would complete the Weekly Motivation Measure questions pertaining to motivation level and vocabulary, but failed to provide responses to the open-ended questions following the survey.

Consequently, although some qualitative comments were gathered, their number was far less than anticipated.

Despite this weakness in the study's design, the qualitative comments that were gathered did help reveal participants' perceptions about WOOP. Interestingly, the second pattern that emerged from these comments was one of non-usage. When participants were asked if they believed WOOP was helping them either maintain motivation or increase their vocabulary knowledge, many students said no. However, following this answer they were asked about their usage of WOOP to which several replies were, "...I haven't really been doing WOOP…", "no, I haven't focused on using it.", and "I didn't use it this week.".

Interestingly, even students who had a favorable outlook of WOOP and reported that they thought it could help maintain their motivation and assist with their vocabulary knowledge also reported frequent non-usage. When asked if they thought using WOOP was increasing their vocabulary proficiency they responded, "Overall, yes, but I think it has mostly been a problem of not applying it in the first place." or "I haven't utilized it like I should, so no". This pattern of non-usage identified through qualitative comments would suggest that although both treatment groups received WOOP training, their failure to use it over the course of the semester could have affected study results.

Additionally, participants who did respond to open ended questions did not respond weekly, but every couple of weeks. Additional comments and perceptions about WOOP usage overtime could have potentially yielded additional patterns or insight about the participants' thoughts and feelings over the course of the semester rather than periodically. Consequently, future studies may consider taking a few minutes each week in class with the focus of journaling about WOOP in order to both remind students to utilize WOOP, as well as to help procure

additional qualitative comments that might give more insight into why students feel the way they do about using WOOP.

Despite several participants with negative perceptions about WOOP, there were also several students who had positive perceptions about WOOP. Both of these groups will be discussed further in the discussion section.

The results on individual items of the MOQ also give further insight regarding how MCII may be affecting motivation orientation between groups, as shown in Tables 5 and 6 respectively.

Table 5

MOQ - Estimated Change Per Group

Motivation Orientation Question	Language Orientation Category	Estimated Change	SE	DF	t Value	Pr > |t|	pEta2
I feel motivated before quizzes and exams.	Pre/Post Motivation Level						0.69
Control		-0.50	0.42	7	-1.18	0.275	
VO*		-2.00	0.73	7	-2.73	0.029	
AO*		2.00	0.73	7	2.73	0.029	
When learning vocabulary, I believe I can achieve my goals more quickly than expected	Vocabulary						0.20
Control		0.83	0.47	7	1.77	0.120	
VO		1.50	0.82	7	1.84	0.109	
AO*		2.00	0.82	7	2.45	0.044	
I believe I can overcome all the difficulties related to achieving my vocabulary learning goals.	Vocabulary						0.38
Control		0.50	0.39	7	1.27	0.244	
VO		-0.50	0.68	7	-0.73	0.487	
AO**		1.50	0.68	7	2.2	0.064	
When I feel stressed about vocabulary learning I simply want to give up	Vocabulary						0.30
Control		0.00	0.45	7	0	1.000	
VO**		-1.50	0.78	7	-1.93	0.096	
AO		0.00	0.78	7	0	1.000	

Motivation Orientation Question	Language Orientation Category	Estimated Change	SE	DF	t Value	Pr > |t|	pEta2
I CAN'T imagine myself living abroad and having a discussion in Arabic	Ideal Self						0.31
Control		-0.40	0.44	6	-0.92	0.394	
VO		0.00	0.69	6	0	1.000	
AO**		-1.50	0.69	6	-2.18	0.072	
If I fail to learn Arabic I'll be letting other people down.	Ought-To L2 Self						0.40
Control		0.00	0.35	7	0	1.000	
VO		-0.50	0.60	7	-0.84	0.430	
AO*		-1.50	0.60	7	-2.51	0.040	
If I make more effort, I am sure I will be able to master Arabic.	Linguistic Self-Confidence						0.43
Control		0.17	0.47	7	0.35	0.734	
VO		-0.50	0.82	7	-0.61	0.560	
AO*		2.00	0.82	7	2.45	0.044	
I believe that I will be capable of reading and understanding most texts in Arabic if I keep studying it.	Linguistic Self-Confidence						0.29
Control		0.50	0.38	7	1.32	0.228	
VO		0.00	0.65	7	0	1.000	
AO*		1.50	0.65	7	2.29	0.056	
I am sure I will be able to write in Arabic comfortably if I continue studying.	Linguistic Self-Confidence						0.53
Control		0.00	0.27	7	0	1.000	
VO		0.50	0.46	7	1.08	0.316	

Motivation Orientation Question	Language Orientation Category	Estimated Change	SE	DF	t Value	Pr > |t|	pEta2
AO*		1.50	0.46	7	3.24	0.014	
I get nervous and confused when I am speaking in my Arabic class.	Arabic Anxiety						0.49
Control		-0.33	0.36	7	-0.94	0.381	
VO*		-2.00	0.62	7	-3.24	0.014	
AO		0.00	0.62	7	0	1.000	
I would feel uneasy speaking Arabic with a native speaker.	Arabic Anxiety						0.47
Control*		-0.67	0.24	7	-2.83	0.026	
VO		-0.50	0.41	7	-1.22	0.260	
AO		0.50	0.41	7	1.22	0.260	
I feel it is important to learn Arabic in order to understand more about the culture and art of its speakers.	Integrativeness						0.49
Control		0.17	0.28	6	0.59	0.574	
VO**		-1.00	0.49	6	-2.06	0.085	
AO		-1.00	0.69	6	-1.46	0.196	
I like the music of Arabic-speaking countries (e.g., pop music)	Cultural Interest						0.44
Control		0.00	0.11	7	0	1.000	
VO*		-0.50	0.19	7	-2.65	0.033	
AO		0.00	0.19	7	0	1.000	

Note. VO = vision-oriented; AO = action-oriented; * significant interaction effect (p <0.05) **nearly significant interaction effect

Table 6

MOQ - Estimated Differences Between Groups

Motivation Orientation Question	Language Orientation Category	Estimated Change	SE	DF	t Value	Adj p
I feel motivated before quizzes and exams.	Pre/Post Motivation Level					
Control, VO		1.50	0.85	7	1.77	0.246
Control, AO*		-2.50	0.85	7	-2.96	0.049
VO, AO*		-4.00	1.04	7	-3.86	0.015
When learning vocabulary, I believe I can achieve my goals more quickly than expected	Vocabulary					
Control, VO		-0.67	0.94	7	-0.71	0.767
Control, AO		-1.17	0.94	7	-1.24	0.470
VO, AO		-0.50	1.15	7	-0.43	0.903
I believe I can overcome all the difficulties related to achieving my vocabulary learning goals.	Vocabulary					
Control, VO		1.00	0.79	7	1.27	0.453
Control, AO		-1.00	0.79	7	-1.27	0.453
VO, AO		-2.00	0.96	7	-2.08	0.165
When I feel stressed about vocabulary learning I simply want to give up	Vocabulary					
Control, VO		1.50	0.90	7	1.67	0.282
Control, AO		0.00	0.90	7	0	1.000
VO, AO		-1.50	1.10	7	-1.36	0.409

Motivation Orientation Question	Language Orientation Category	Estimated Change	SE	DF	t Value	Adj p
I CAN'T imagine myself living abroad and having a discussion in Arabic	Ideal Self					
Control, VO		-0.40	0.82	6	-0.49	0.878
Control, AO		1.10	0.82	6	1.35	0.422
VO, AO		1.50	0.97	6	1.54	0.340
If I fail to learn Arabic I'll be letting other people down.	Ought-To L2 Self					
Control, VO		0.50	0.69	7	0.72	0.758
Control, AO		1.50	0.69	7	2.17	0.144
VO, AO		1.00	0.85	7	1.18	0.499
If I make more effort, I am sure I will be able to master Arabic.	Linguistic Self-Confidence					
Control, VO		0.67	0.94	7	0.71	0.767
Control, AO		-1.83	0.94	7	-1.94	0.196
VO, AO		-2.50	1.15	7	-2.17	0.146
I believe that I will be capable of reading and understanding most texts in Arabic if I keep studying it.	Linguistic Self-Confidence					
Control, VO		0.50	0.76	7	0.66	0.792
Control, AO		-1.00	0.76	7	-1.32	0.428
VO, AO		-1.50	0.93	7	-1.62	0.299
I am sure I will be able to write in Arabic comfortably if I continue studying.	Linguistic Self-Confidence					
Control, VO		-0.50	0.53	7	-0.94	0.637
Control, AO**		-1.50	0.53	7	-2.81	0.060

Motivation Orientation Question	Language Orientation Category	Estimated Change	SE	DF	t Value	Adj p
VO, AO		-1.00	0.65	7	-1.53	0.336
I get nervous and confused when I am speaking in my Arabic class.	Arabic Anxiety					
Control, VO		1.67	0.71	7	2.34	0.115
Control, AO		-0.33	0.71	7	-0.47	0.888
VO, AO		-2.00	0.87	7	-2.29	0.123
I would feel uneasy speaking Arabic with a native speaker.	Arabic Anxiety					
Control, VO		-0.17	0.47	7	-0.35	0.934
Control, AO**		-1.17	0.47	7	-2.47	0.095
VO, AO		-1.00	0.58	7	-1.73	0.260
I feel it is important to learn Arabic in order to understand more about the culture and art of its speakers.	Integrativeness					
Control, VO		1.17	0.56	6	2.08	0.175
Control, AO		1.17	0.74	6	1.57	0.327
VO, AO		0.00	0.84	6	0	1.000
I like the music of Arabic-speaking countries (e.g., pop music)	Cultural Interest					
Control, VO		0.50	0.22	7	2.29	0.123
Control, AO		0.00	0.22	7	0	1.000
VO, AO		-0.50	0.27	7	-1.87	0.217

Note. VO = vision-oriented; AO = action-oriented; * significant interaction effect (p <0.05) **nearly significant interaction effect

MOQ Data

The results from MOQ showed several level items that revealed statistically significant shifts in agreement or disagreement within individual groups as well as a couple items that showed statistically significant differences between groups. Table 5 shows the mean changes for each of the three groups pre and post. Table 6 shows the mean differences between each group for level items that were statistically significant or approaching statistical significance.

Statistical significance was found in eight of the 15 language orientation categories, including pre/post motivation level, vocabulary, ideal-self, ought-to L2 self, linguistic self-confidence, Arabic anxiety, integrativeness, and cultural interest (see Table 5). Within those categories, 13 level items showed statistical significance.

Interestingly, of those 13 items, three were categorized as linguistic self-confidence and an additional three items were categorized as vocabulary but had a focus of vocabulary self-confidence by stating things such as, "I believe I can overcome all the difficulties related to achieving my vocabulary learning goals" and "When learning vocabulary, I believe I can achieve my goals more quickly than expected." The AO group showed an increase in agreement towards almost all of the statements categorized as vocabulary and linguistic self-confidence as shown in Table 5. The AO group showed statistically significant gains in all three linguistics self-confidence items ($p = 0.044$, $p = 0.055$, $p = 0.014$). When asked about achieving their vocabulary goals and overcoming vocabulary difficulties quickly, the AO group also showed significant and almost significant gains ($p = 0.044$, $p = 0.063$ respectively)

The AO group showed a significant gain ($p = 0.029$), with an estimated change of 2, when asked how motivated they felt before quizzes and exams. Conversely the VO group showed a significant loss ($p = 0.0292$), decreasing their motivation by 2, when evaluating their

motivation prior to quizzes and tests. However, the VO also saw a significant loss of anxiety level (p = 0.014) from their pre to post questionnaire results when asked if they got nervous or confused when speaking Arabic in their classes.

While seeking to determine if MCII could affect motivation and vocabulary acquisition, this study also sought to better understand participant's attitudes towards MCII. Table 7 shows that across both treatment groups the prevailing perception was that MCII had not helped maintain or increase motivation or vocabulary proficiency.

Table 7

Participant perceptions of WOOP

MCII Group	# of Participants that responded	WOOP maintained motivation	WOOP increased motivation	WOOP increased vocabulary proficiency	Participants with negative perception while not regularly applying WOOP
VO	5	20%	20%	40%	80%*
AO	3	33%	33%	0%	67%*

Note: VO = vision-oriented; AO = action-oriented; Percentages shown were calculated using only the # of participants that responded. *See discussion section for explanation of qualitative comments correlating with these findings

Comments by participants were mixed and revealed both positive and negative attitudes towards WOOP (MCII) as applied to motivation to learn L2 vocabulary. When asked if they believed that WOOP had helped them increase their vocabulary knowledge one participant wrote, "No, I haven't focused on using it." Conversely, a student who did report that they believed WOOP was helping them responded, "Yes, I was able to focus on my goal and why I want to be here." Another stated, "It helped me visualize my goal."

Interestingly, there was also a participant in the vision-oriented group who indicated that "...I feel like having an actual plan is more useful than just a thought to return to." and that

WOOP was not helping them maintain their motivation or increase their vocabulary proficiency. This is another instance where additional qualitative data could have been helpful. Had this participant written more feedback consistently, it might have helped reveal if they're focus became more action oriented over time and how this may have affected their motivation and vocabulary acquisition goals. The lack of qualitative responses provided in this study, however, do not give additional insight into how the participants' perceptions of WOOP may have continued to develop over time. This weakness may be rectified in future studies by potentially setting aside time to journal about WOOP or asking about participants goals and plans in relation to WOOP as part of their journaling. This could help reveal how students are progressing towards their goals or are adjusting their goals to make them more attainable. It may also help reveal how participant attitudes may shift over the course of the study as participants continue to use WOOP.

Additionally, a pattern of non-usage emerged wherein participants from both treatment groups acknowledged that they were failing to implement MCII regularly in their study. Additional observations about both positive and negative perceptions of WOOP and comments gathered from participants will follow in the discussion section.

Discussion

The goal of this study was to determine if MCII affected participants' motivation to learn L2 vocabulary. It also sought to determine if participants who utilized MCII showed marked improvement or higher vocabulary acquisition than those who did not utilize MCII.

Though the results of this study showed that there was not a statistically significant difference in overall motivation between the control and treatment groups, there were several statistically significant item-level differences in participant motivation orientation that occurred.

Additionally, an examination of raw average scores of individual students along with their qualitative comments give greater insights about potential MCII usage and its impact on an individual basis. These raw scores also help reveal how individual student's motivation levels may have affected the overall adjusted scores of their group.

An examination of the qualitative data also reveals additional insight about the perception of MCII among participants. It also allows insight into how regularly MCII was applied over the course of the study.

The following discussion examines the differences in motivation and vocabulary scores found between the control and treatment groups. Participant perception is then examined through the use of qualitative data.

Motivation Measures

Motivation Level

Because motivation is dynamic, (Campbell et al., 2011) this study attempted to gather multiple measures of motivation over the course of the study. The Weekly Motivation Measure taken by participants attempted to track motivation not only during the time the survey was being taken, but also asked participants to recall how motivated they felt during other times in the week such as pre and post vocabulary study and quizzes.

An examination of the data in Tables 2 and 3 show that there are no significant gains or losses in motivation between groups. However, a closer look at the data shows that there are level items in each questionnaire that approach significance, suggesting a potential for further research and examination even though these items were not found to be conclusive in this study. This data also reveals several interesting patterns worth discussion that could help lead to future research questions.

An examination of motivation prior to the Weekly Motivation Measure as seen in Tables 2 and 3 show that the control group and the AO group had a net decrease of motivation prior to taking their vocabulary quizzes. Research has shown that it is common for motivation to decrease over the course of a semester (Campbell et al., 2011), so this decrease in these groups is unsurprising. However, unlike its counterparts, the VO group showed a net increase in motivation prior to taking their vocabulary quiz.

Oettingen (2012) has found that mental contrasting has been successful in changing behavior because it helps associate the current reality with the desired goal, allowing participants to identify the gap. This in turn allows individuals to make needed adjustments and has been shown to increase motivation to achieve their goal when expectations of success are high (Oettingen, 2012). Consequently, it is not surprising that the VO group saw an increase in their motivation level. However, because the AO group was also practicing MCII and because their plan was already focused to incorporate action towards their intended goal, it is surprising that they did not see similar gains in motivation.

The finding that the VO group did increase more in motivation than the AO group is more similar to the 2020 study done by Le-Thi and colleagues which found that visionary self-regulation techniques were more effective than motivational self-regulation strategies. However, in that same study, both motivational self-regulation strategies and visionary self-regulation techniques were found to produce significant gains, whereas the gains and losses in this study only approached statistical significance.

It is particularly interesting to note that while the motivational gains and losses, measured by the Weekly Motivation Measure, do share some overlap with the motivational measure questions of the MOQ, there were some variations. Perhaps the greatest of these variations was

the measure of motivation prior to vocabulary quizzes. The Weekly Motivation Measure results show a non-significant increase in the motivation level of the VO group and an almost significant decrease in the motivation of the AO group. Conversely, the MOQ shows a significant decrease of motivation in the VO group and a significant increase of motivation in the AO group. While it may not be possible to determine the exact cause for the discrepancy, one explanation may be that the Weekly Motivation Measure was taken weekly and was paired with a weekly vocabulary quiz. In contrast, the MOQ was taken only pre and post study and was not paired with a vocabulary quiz. The pairing of the questionnaire with a quiz could have possibly affected participants' perceived motivation as they prepared for or completed the quiz when responding to the Weekly Motivation Measure. When responding to the MOQ, the lack of proximity to a quiz may have also possibly affected participants' self-reported motivation level, contributing to the overall discrepancy between the two conflicting reports.

Another factor that could have affected this data was how frequently each survey was completed. The Weekly Motivation Measure was completed weekly whereas the MOQ was completed only twice over the course of the study. Consequently, because the Weekly Motivation Measure was more routine and was administered more frequently it may better represent a holistic picture of participants' gains and losses of motivation over time as opposed to the MOQ which shows a snapshot of participant motivation pre and post. These MOQ pre and post measures do yield interesting data points for those time periods, but because Weekly Motivation Measure used multiple data points to measure motivation over time, they are probably more reflective of participant motivational changes over the course of the semester.

Because the Weekly Motivation Measure was taken more frequently over the course of the semester, the vocabulary discussion below will review items comparing them with the results

from the Weekly Motivation Measure scores. A discussion of the raw averages from the Weekly Motivation Measure will follow.

Vocabulary Proficiency

This study also sought to determine whether participants who utilized MCII would experience an increase in vocabulary proficiency as measured by regular vocabulary quizzes. No differences were statistically significant. Because overall motivation levels were also found to be statistically insignificant, this is not an unexpected result. However, a discussion of patterns and observations can still be useful.

Motivation has been shown to increase academic performance in the past (Bolkan et al., 2016), so it was expected that higher levels of motivation would correlate with higher vocabulary scores on regular quizzes. Though the VO group was the only group that showed motivational gains across all MOQ statements, the AO group also saw an increase in their vocabulary scores. Though not significant, the average increase of quiz scores reported for the AO group is surprising because their group had the greatest total average loss of motivation pre to post. This seems contradictory to Tanaka's (2017) findings that marked higher levels of intrinsic motivation as a predictor of larger vocabulary size. In this instance however, the AO group vocabulary gains did not correlate with an increase in motivation.

One possible cause for this discrepancy may be found when examining the raw averages for each participant within the AO group. Student 10 had a drastic drop in motivation from pre MCII training to post MCII training. This drastic drop in conjunction with the small sample size could have had a larger impact on the overall AO groups average gain and losses in motivation. Additionally, research has shown that demotivated students have a larger impact on their peers' motivation than motivated students (Tanaka, 2017) Because the learner situation is a component

that affects motivation (Dörnyei & Ryan, 2015), it could be possible that overall class motivation was lowered in the AO group in part because of the drastic demotivation of one of the students which in turn may have demotivating effects on the others.

Another possible explanation that may be a contributing factor to the similar vocabulary scores between the AO and VO groups despite their differences in overall motivation level is that the AO group only had loss of motivation during class pre and post quiz with LSM values of -1.55 and -1.08 respectively. So, while these losses of motivation were greater, they were confined to the time frame and circumstances surrounding the quiz. Outside the class pre and post study the AO group experienced motivational gains of 0.54 and 0.29. In contrast, the control group experienced small losses in motivation but both in and out of the classroom. It's possible that the circumstances of when motivation was lost also influenced vocabulary quiz scores. If participants within the AO group had higher levels of motivation during and after study and vocabulary practice, there is a potential that it may have caused their expectations of success during vocabulary quizzes to increase. Because expectations of success can affect MCII outcome (Oettingen, 2000) it's possible that increased expectations of success or a possible increase in self-efficacy may have also contributed towards the AO groups' gain in vocabulary quiz scores.

Weekly Motivation Measure Raw Averages

While a comparison of gains and losses in participants' motivation levels through the examination of inferential statistics is valuable, a review of descriptive statistics can also be valuable. This is especially the case in studies such as this, in which there is a small sample size. Generally, a sample size of approximately 30 allows for statistical generalizations to be made that are fairly representative of the intended demographic (Loewen et. al, 2021). However, as demonstrated by enrollment levels during this study, in L2 classes it can be difficult to achieve

this number. This does not make smaller sample sizes less valuable, but it is important to recognize that while inferential data can help identify potential trends of interest, it should be considered along with descriptive data and potentially qualitative data to help give a better explanation of what was occurring during the time of the study.

An examination of mean motivation levels of each group show that both the control group and the AO group saw a decrease of motivation over the course of the semester. In contrast, the VO group saw a slight increase of motivation over the course of the semester (See Table 4). However, even the increases seen by the VO group were small and not statistically significant.

The rise in VO motivation is not surprising given previous studies such as that conducted by Le-Thi and colleagues (2020) that also found that visionary strategies helped increase participant motivation level. However, it was also anticipated that the AO group would also see an increase of motivation over the course of the semester since Oettingen found that implementation intentions help increase goal achievement (2001). One explanation for these differences may be in the lack of usage of WOOP by both treatment groups over the course of the semester. Another factor that must be considered is sample size and variance. Because of the limited number of participants within each group, it is difficult to identify patterns that may be applicable to a larger population group. Additional study with more participants would be needed to determine if patterns found in this study could be generalized to a larger group with a reasonable standard error.

Motivation Orientation

Along with changes in motivation level, this study also examined motivation orientation through the use of the MOQ. An examination of the motivational orientation gains and losses

within each group as well as the differences between groups did reveal several item-level statements that were statistically significant. These findings help to better explain the type of motivation that participants may be experiencing and how their attitudes shifted over the course of the study.

Perhaps the most interesting finding of the MOQ is the increase of linguistic self-confidence within the AO group. Table 5 shows that the AO group saw significant differences between their pre and post scores in all linguistic self-confidence items and in two of the three vocabulary items that focused on vocabulary acquisition self-confidence. When compared with the VO and control groups this finding did not appear to have statistical significance except between the control group and AO group when participants were asked if they thought they would be able to write comfortably in Arabic if they continued studying. In this case the AO group had a greater increase in agreement than the control group that proved statistically significant.

Conversely, though the VO group also utilized MCII, the only significant gains from pre to post seem to focus on lessening stress and anxiety as well as cultural integration and orientation. This is interesting because since both treatment groups were practicing MCII it may have been expected that both groups would see gains in similar level items. In this case, however, it appears that the VO group, while still making some gains, did not make as many statistically significant gains as their AO counterpart. Additionally, it is interesting to note, when examining the estimated changes of the LSM of each group, that the VO group actually seemed to lose linguistic self-confidence in several areas where the AO group gained.

While more research is needed to determine the exact reason for this difference between these groups, one possible explanation is their action vs vision focus. Research has shown that

individuals who dwell on positive fantasies or indulge in positive outcome visualization without mental contrasting or implementation intentions are actually less likely to become more motivated to act in pursuit of goal achievement (Oettingen et al., 2005). If the VO group plan to remember what first motivated them began to shift to positive visualization dwelling rather than contrasting and implementation intentions, it's possible that it may have caused the VO group to make less progress than their AO counterparts.

Another possibility is that because the AO group had a physical action towards goal achievement built into their plan, perhaps their expectation for goal success increased more than that of their VO counterparts.

The AO group reported greater, though non-significant, gains of motivation level during vocabulary study and practice than the VO group (See Table 2). Though not statistically significant, the AO group also showed greater estimated gains of motivation during vocabulary study and practice than the VO groups. Perhaps because of the increased motivation during study, the AO group had higher expectations of success on vocabulary quizzes and tests. This higher expectation also helped the AO group participants increase in their perception of their own linguistic self-confidence. Further study would be needed to verify this, especially given the diverging data collected between the MOQ and Weekly Motivation Measure results regarding motivation level prior to quizzes and tests. However, even if the AO group did not have increased motivation prior to quizzes over the course of the semester, it does appear that they still had a significant increase in linguistic self-confidence.

This positive shift in linguistic self-confidence is important because it is possible that it may help encourage participants to future study. Olsen (2017) found that while the reason for high attrition rates among language classes are often complex, perhaps the greatest influencing

factor within the classroom, is learner experience. If learners enjoy their learning experience it is more likely that they will continue language study. Consequently, if participants have a greater perceived self-confidence in their language abilities it could increase their positive perception of their learner experience and their enjoyment of language learning. This is especially important, given that there is typically a high attrition rate in upper-level language classes (Dupuy, 2000; Grittner, 1968) Increased linguistic self-confidence and positive perception of learner experience could potentially help decrease this attrition rate.

MCII Perception & Qualitative Comments

While quantitative analysis is an important part of any study and can reveal statistical significance, qualitative data is often as important in order to better understand what participants are thinking and feeling. This is especially the case when measuring a dynamic variable such as motivation because of its tendency to ebb and flow over time (Campbell et al., 2011). Qualitative data also allows for better understanding of individual differences and individual circumstances of each participant. Some of this data may be specific to the individual alone, but patterns can emerge giving greater insight to overall class experience, stressors of a demographic, or other factors that may not be accounted for through questionnaire and statistical analysis.

Participant responses to qualitative questions in the Weekly Motivation Measure did provide additional insight. While not all participants provided responses, the responses that were given help give greater insight to the perception of MCII between the treatment groups, how often both groups were using MCII and how their perception and usage could have affected the study results.

As shown in Table 7, at first glance, the perception towards MCII usage appears to be mostly, if not completely negative. Multiple participants across both VO and AO groups

indicated that they did not feel it was helpful to help maintain or increase motivation and they did not feel that it was helping to increase their vocabulary proficiency. Though many simply indicated they did not believe it was helpful, one participant from the vision-oriented group said, "I feel like having an actual plan is more useful than just a thought to return to." In this case, it appears that this participant perceived the vision-oriented plan as similar to positive visualization without implementation intentions rather than as part of a way to recognize the gap between where they wanted to be and where they were. It's possible that this sentiment could have been shared by others as well.

A study by Oettingen (2012) found that when mental contrasting was applied to help people overcome their fears, participants with high expectations of success were able to overcome their fears. However, participants with low expectations of success were not successful (Oettingen et al., 2005). It's possible that a similar effect has happened in this study. Participants who didn't perceive MCII to be of value initially, or had low expectations of success, subsequently gained little from it and thereby solidified their perception of MCII as ineffective.

Another probable explanation for the perceived ineffectiveness of MCII is simply lack of usage. This theory actually has quite a bit of supporting evidence from qualitative comments. When asked about their usage from week to week, many participants acknowledged they simply hadn't done it. When asked if it was helping, one participant said, "No, I haven't focused on using it." Another added, "I haven't utilized it like I should, so no". These comments indicate that even though the quantitative data would suggest a negative perception of MCII, there are participants that recognize that MCII could potentially be a useful tool; they simply aren't using it. One participant demonstrated this line of thinking when asked if they believed that MCII helped increase their vocabulary proficiency. They responded, "Overall, yes, but I think it has

mostly been a problem of not applying it in the first place". This same participant indicated that same week that they did not believe that MCII had helped them maintain or increase their motivation. It could be that they could more easily see or track the benefits of MCII when looking at their vocabulary proficiency and it was harder to perceive gains and losses in motivation if they were slight. Or it could be that this participant had similar feelings towards MCII usage in general-that overall, it seemed to help, but if it wasn't applied, it didn't help. These comments acknowledging non usage also give insight to the results seen in Tables 2 and 3. If MCII was not utilized regularly it is unlikely that participants would experience significant positive change in these areas that would lead to a positive perception of MCII. Conversely, qualitative comments made by those who were using MCII more regularly correlated with a positive perception of MCII.

Future research could examine participant perception in more depth to try and gain a better understanding of how many participants actually feel negatively towards MCII usage versus those that do not have strong negative feelings, but perhaps are simply not applying it as often. This study used a yes/no question format. Future studies could adapt these questions to a six point Likert scale to gain a better understanding of the intensity of feelings participants are having.

One way in which this study has attempted to gain further insight into participants' mindset is by comparing raw average motivation scores with qualitative comments made by those participants. Though not all participants volunteered qualitative data, those that did offer insights into aspects that may have been affecting their motivation.

One of the strongest examples of this can be seen by examining the raw average scores of Student 10 in the action oriented group along with his qualitative comments. Across all three

groups, Student 10 experienced the largest drop in motivation before and after vocabulary quizzes. Student 10 also experienced the lowest initial rates of motivation both during and after motivation practice and study and post MCII training average motivation scores remained low or fell lower. Student 10 also provided comments that help give greater insight to the large amount of demotivation that can be seen in the data. Following MCII training, when asked if the participant thought that applying WOOP had increased their vocabulary proficiency, Student 10 replied “Not a ton because I decided not to continue studying Arabic and so the motivation to study vocabulary has been very low...also I haven't been doing WOOP for that very reason.” As can be surmised from Student 10’s comment, once their desire to pursue the target language changed, their motivation relating to language tasks also dropped substantially as did their usage of MCII.

Additional qualitative comments can also give insight into the thought processes and usage of students who felt that MCII was positive or saw motivational gains over following MCII training. Two such examples are Student 11 from the AO group and Student 15 from the VO group.

Student 11 saw increases in their motivation levels both before and after quizzes and during and following vocabulary study and practice. Motivational increases during and following study and practice moved a full point higher on the Likert scale. Responses to open-ended questions about the usefulness of WOOP and whether it was helping to achieve higher levels of motivation and vocabulary acquisition also were insightful. In their first response post MCII training when they were asked whether they thought that WOOP had helped them maintain motivation to learn vocabulary that week, Student 11 wrote, “Well, I just learned about it...but I already feel more motivated…”. Because self-regulation tools, such as MCII, often are more

successful when there are higher levels of perceived self-efficacy and confidence that the regulation tools in use will be productive (Zimmerman, 2002), the comments made by Student 11 demonstrate that it's likely that they held high expectations of success when beginning their use of WOOP. This was further validated by a later response to the question that asked whether they believed that the use of WOOP was helping to increase their vocabulary proficiency. Student 11 responded, "Not yet-but I bet it will as I apply it more."

Another interesting observation that can be made about Student 11 based on their responses is their focus on visualization despite being a part of the AO group. The main difference between the treatment plans of the AO group and the VO group was that the VO group would incorporate remembering why they were initially motivated to study their L2 vocabulary, while the AO group would incorporate some sort of action into their plan to overcome their anticipated obstacle. Examples were given such as studying five more minutes or taking a break and then returning to study two more words. However, it appears that despite the action-oriented focus of their group, what stood out to Student 11 was the visualization aspect, particularly visualization of their goal. When asked how WOOP helped motivate them to study L2 vocabulary, Student 11 replied, "visualizing my goal is motivational." This focus on visualization is interesting for several reasons. First, it's interesting because positive fantasy dwelling has been shown to be less productive in helping individuals achieve greater goal striving and subsequent goal achievement (Oettingen et al., 2001). Student 11 did contrast their desired goal with their present reality which could have helped them increase motivation to overcome the obstacles in their present reality in order to reach goal attainment. However, in a study by Oettingen and colleagues they found that reversing the order of mental contrasting and having participants focus first on the present reality and then their desired goals typically induced

relief in participants rather than increased goal striving (2002). This is interesting when applied to Student 11 because it appears that, unlike the Vision Oriented group, Student 11's focus was not on what initially motivated them or past concrete emotions or experiences they had to help remind them of their initial motivation, but on visualization of a future-self that had reached goal attainment. However, it is also possible that this visualization of future-self also included additional visualization techniques such as remembering obstacles that the student's future self may encounter (Le-Thi et. al, 2020) which may have again helped to activate deeper goal striving. Additional commentary by Student 11 would be needed to know for sure.

Finally, it is interesting to look at the raw averages of student scores from the VO group. Student 13 increased motivation before and after quizzes and following vocabulary study. Student 13 is also one of the students who appeared to be regularly utilizing WOOP. Additionally, Student 13 also seemed to have a positive perception of WOOP. When asked if they thought utilizing WOOP helped improve their vocabulary proficiency, Student 13 responded, "I honestly have no idea, but I would like to think so." Another week, when Student 13 had not utilized WOOP on their own they answered, "When I remember to use it, yes I think it helps." Student 13 also indicated on several Weekly Motivation Measures that they believe that using WOOP had helped them increase their motivation that week. When asked how WOOP had helped them, Student 13 wrote, "It has reminded me why it is important, which is what gave me the motivation to study" and "I was able to keep my focus on my goal and why I wanted to be here...I was reminded of motivations to begin with and that I'm almost there." Interestingly, comments also revealed that the use of MCII encouraged Student 13 to apply other self-regulation strategies that likely also help them make progress towards goal attainment. When speaking of how WOOP increased their motivation to study they wrote, "It has reminded me

why I enjoy Arabic and also helped me to break down my studying into easier chunks." This use of additional self-regulation strategies may show that use of MCII and increased motivation levels may also increase the likelihood that those individuals will then use additional self-regulation strategies to help overcome obstacles in their present reality.

Student 15 also showed increased motivation across all categories over the course of the semester. When asked how often they were using MCII, Student 15 revealed that they were not using it at all. Additionally, when asked if they thought WOOP had increased their vocabulary proficiency, Student 15 responded, "Not really, I feel like having an actual plan is more useful than just a thought to return to." Though additional responses by Student 15 were not given, it would be interesting to know if like Student 13, Student 15 was utilizing other self-regulation tools that may have helped increase their motivation and vocabulary proficiency. If that was indeed the case, it would also be interesting to know what self-regulation strategies were being used and with what frequency.

The increase of motivation in both Students 13 and 15 would suggest that a larger sample size is needed to better determine if motivational gains can be attributed to the application of MCII to motivation to learn L2 vocabulary. However, the positive feedback from Students 13 and 11 would also suggest that whether statistically significant on a large scale or not, MCII as applied to motivation to learn L2 vocabulary can still prove a valuable self-regulation tool for some individuals. Though more study would be needed to make a generalized determination, it does appear that applying MCII with a vision-oriented focus may help some individuals perceive gains in motivation which in turn may also help lead them to additional self-regulation strategies to better assist in goal attainment.

These positive results seem to indicate that at least for some, when MCII is being utilized regularly there is a self-reported perception of increased motivation and vocabulary proficiency. This data is useful because it implies that though MCII may not help all participants, there are those that seem to benefit from it greatly. Whether it helps remind them of why they were initially motivated, or whether it helps them create an action plan for better personal study, MCII is a cost effective and easily individualized tool that remains useful and worthwhile.

Limitations and Suggestions for Further Research

Two limitations of this study are sample size and participation. Because this study found participants in several Arabic classes, the number of participants was limited by the number of students that enrolled. Arabic is often perceived as a difficult language and class sizes are typically not large. Consequently, while Tables 2 and 3 show no significant differences between treatment and control groups in this study, with a larger sample size, more data may be collected that could better reveal the scope and nature of items that were approaching statistical significance even with a smaller sample size. This could also help give further insight to data that did show statistical significance in this study such as differences in motivational gains and losses between groups on level items of the MOQ. A larger sample size would better represent the overall demographic of students and allow more data points to analyze in order to better extrapolate patterns that may be more representative of the general population. Lowenen (2021) and colleagues recommend engaging in sample size planning prior to a study and considering other analytical approaches to data interpretation such as looking at two to three means rather than using more complex analyses and drawing cautious conclusions while looking at data holistically when conducting a study with a smaller sample size.

Another limitation was the utilization of MCII within the two treatment groups. Though presentations were given, and weekly reminders sent to the participants, participation was optional and there were those who declined to answer or failed to regularly utilize MCII. Because there was a substantial proportion of participants in the treatment groups who were not utilizing MCII regularly, it became difficult to definitively determine whether there were any constructive gains or losses in motivation or vocabulary proficiency that can be attributed to MCII.

Additionally, while this study did include a group which received no MCII treatment, all groups received the Weekly Motivation Measure, as well as a presentation at the beginning of the semester that outlined the importance of motivation and vocabulary acquisition in L2 learning. It is possible that these factors caused not only the two treatment groups to be aware of their motivation, but all groups, including the group that did not receive MCII training. This awareness may have caused some students to monitor their motivation levels more closely over the course of the semester even if they had not been introduced to MCII. This awareness could have adversely affected the study results by potentially making a difference between the three groups less likely. Future studies ought to consider a control group in which participants are not given the Weekly Motivation Measure in order to remove the possibility for increased awareness of motivation level among control participants.

Future studies may also consider more qualitative data including additional journaling and individual participant interviews following the study. Additional input from participants throughout the study as well as following would give greater insight to what participants were thinking over time. It would also give greater insight into whether the use of MCII as applied to motivation had encouraged them to use additional self-regulation strategies that had also helped

them progress towards their goals. If additional self-regulation strategies were used, it would give greater insight on what strategies were used, how frequently, and if there were some that were more effective than others.

Future studies may also consider measuring self-regulation development over time because motivation is one of the components of self-regulation (Zimmerman, 1990) and learning and motivation are viewed as interdependent within the theories of self-regulation (Zimmerman, 2002). Because this is the case, it would be expected that as motivation levels rose that there would be a corollary rise in participants' ability to self-regulate. This increased self-regulation could then help contribute to increased motivation levels, further helping the participants' progress towards goal achievement.

Self-regulation techniques such as self-evaluation, and MCII can help students recognize gaps between their desired outcome and their current reality and help spark motivation to close these gaps (Zimmerman, 2002; Oettingen, 2000). These gaps could be closed using the help of other self-regulatory strategies such as changing their environment, adapting to negative feedback, or other self-regulatory strategies that may help stem demotivation and instead help lead to goal striving and increased goal progress.

Additional studies examining quantitative data should attempt a greater sample size if possible and more potential follow up with participants in treatment groups to encourage the regular use of MCII. One suggestion for follow up may be to set aside a few minutes in class for journaling time in order to help remind participants to do it. Another suggestion for follow up is to actually administer WOOP sessions in class regularly. Participants would be able to focus on their own wishes and plans, but it would help them remember to do it and ensure regular usage.

This could better determine if MCII as applied to motivation to learn L2 vocabulary results in statistically significant differences or not.

Successful application of MCII in other fields such as health care have shown that MCII has been effective in helping participants reduce harmful health habits such as smoking (Mutter et al., 2019) and high-risk drinking (Wittleder et al., 2019) and increase healthy habits such as eating better and increasing exercise (Marquardt et al., 2017). Additional studies demonstrate MCII's potential to help at-risk students by bolstering grades and reducing tardiness (Duckworth et al., 2013). MCII has also successfully helped working mothers increase attendance and time management skills (Oettingen et al., 2015).

These successes suggest that many of the benefits, such as reducing poor habits and increasing good habits, along with increasing self-regulatory strategies such as time management could be applied to L2 classes and learning through the utilization of MCII. For example, the formula for the application of MCII to create healthy habits such as establishing regular exercise routines could be similarly applied to help students develop consistent and productive language study routines. MCII could also be used to motivate L2 students to discontinue poor habits such as procrastination or inadequate devotion of time or attention. Furthermore, a student who is fearful of participating in class may apply MCII to remind them of their goals of studying abroad or using the L2 professionally to motivate them to get past the anxiety barrier. WOOP may help them recognize that they will not be prepared for later opportunities such as study abroad or work opportunities if they do not find a way to practice their speaking now. This could help them overcome their current trajectory of passive observance by better recognizing their barrier and moving forward toward their long-term goal or goals. Self-evaluated successful progress in these

and similar endeavors can further increase students' ability to self-regulate and use other self-regulatory tools to make strides towards goal attainment.

Finally, self-reported data are known to be unreliable. In combination with a time lag between when participants are feeling motivated and when they are reporting it, as was the case with the Weekly Motivation Measure, it is possible that participants are not accurately remembering how motivated they were feeling at different times throughout the previous week. Because it's difficult to find participants who are willing to take multiple measures of motivation when outside the classroom, it may be useful to measure motivation several times during the class. However, as shown by the changes in motivation level of the AO group in Table 2, it's possible that maybe there is a difference in motivation level in and out of the classroom that would be missing. Having participants self-report after the fact does leave the possibility of inaccurate reporting of those same values.

Conclusion

This study examined the impact of MCII as applied to motivation to learn L2 vocabulary. The results suggest that MCII does not affect student motivation to learn L2 vocabulary. No statistically significant differences were found between the control group or either treatment group for overall motivation level for vocabulary acquisition. Statistically significant differences between and within groups were found in several level items of the MOQ. The MOQ results indicated that within the AO group there seems to be an increase in linguistic self-confidence overtime.

Qualitative data show that while it appeared that many participants did not perceive MCII to be helpful, several of these 'negative' perceptions actually leaned towards a pattern of non-usage and consequential uncertainty of whether MCII could be helpful. Addressing this in a

Likert scale in the future may help provide additional insight about the intensity of participant's perceptions and whether they had negative, neutral or positive feelings towards MCII and its effectiveness. Additional open-ended questions could then be used to further identify why participants felt the way they did and determine if additional self-regulatory tools were being utilized in conjunction with or instead of MCII. Researchers may also wish to measure students' ability to self-regulate over time to see how closely levels of motivation and self-regulation correlate and to determine if other self-regulation tools are incorporated overtime that may also be influencing vocabulary acquisition.

These data also revealed that, among treatment groups, there was a pattern of MCII non-usage. This in combination with a small sample size may have disproportionately affected the conclusions which can be drawn from the data collected. Consequently, additional research with a larger group may more accurately allow conclusions to be drawn that would better fit the general population and better determine to what extent MCII may affect motivation to learn L2 vocabulary. Or, if a larger sample size is not feasible, additional qualitative information should be gathered and related to both inferential and descriptive statistics in order to create a more holistic picture of the impact of MCII.

Qualitative insights from several participants in both treatment groups indicate a tendency to perceive an increase in both motivation level and vocabulary acquisition. Because all students were studying vocabulary, an increase in vocabulary knowledge is expected. However, because data also showed that there was a non-significant difference in the amount of vocabulary proficiency between the two treatment groups, and between the control group and either treatment group, it is interesting that some participants believed that the application of MCII was increasing their vocabulary acquisition more than if they had not been using MCII. It could be

possible that, while the differences were non-significant overall, there were some individuals who did benefit from MCII usage. This, along with items that were nearing significance and emerging patterns in the data that were collected, suggests that MCII could still be a beneficial self-regulation tool that could be applied to this and many other areas of L2 acquisition. Further study is needed to accurately verify the impact of MCII on motivation to acquire L2 vocabulary and other acquisition tasks, and such research would be beneficial and worthwhile in a number of ways.

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Appendix A

MOQ

Section 1

Q1 Thank you for completing this survey, which is designed to get you to think about your own motivation to study Arabic vocabulary. To help us understand how your motivation changes throughout the semester, it is important for us to have your name attached with survey results. Please help us by providing your name in the blank below. Your individual response will be kept confidential and will not be shared with teachers or others. Only averages across students will be shared and reported

Q2 Please enter your name.

- o First Name _____
- o Last Name _____
- o Class Section # _____

Q6 Have you learned or are you now learning another language besides Arabic?

- o Yes
- o No

Skip To: Q3 If Have you learned or are you now learning another language besides Arabic? = No

Q7 Please list the other language(s) you speak

_____

Section 2

The following statements were presented with a 6-point Likert scale ranging from strongly disagree to strongly agree. Participants were asked to select the answer that best reflected their beliefs and attitudes. The questionnaire statements are given below.

1. I feel motivated today.
2. I felt motivated before studying vocabulary this week.
3. I felt motivated after studying vocabulary this week.
4. I feel motivated before quizzes and exams.
5. I feel motivated following quizzes and exams.
6. When learning vocabulary, I believe I can achieve my goals more quickly than expected.
7. When learning vocabulary, I persist until I reach the goals that I make for myself.

8. I believe I can overcome all the difficulties related to achieving my vocabulary learning goals.
9. When I feel stressed about vocabulary learning, I know how to reduce this stress.
10. When I feel stressed about vocabulary learning I simply want to give up.
11. When I feel stressed about my vocabulary learning, I cope with this problem immediately.
12. Vocabulary acquisition is an important part of speaking Arabic.
13. I enjoy learning new vocabulary words.
14. I would like to spend lots of time studying Arabic.
15. I am prepared to expend a lot of effort in learning Arabic.
16. I am working hard at learning Arabic.
17. I CAN'T imagine myself living abroad and having a discussion in Arabic.
18. Whenever I think of my future career, I imagine myself using Arabic.
19. I can imagine myself speaking Arabic with international friends or colleagues.
20. I can imagine myself living abroad and using Arabic effectively for communicating with the locals.
21. I can imagine myself speaking Arabic as if I were a native speaker of Arabic.
22. I can imagine myself writing Arabic e-mails/letters fluently.
23. The things I want to do in the future require me to use Arabic.
24. I study Arabic because close friends of mine think it is important or want me to.
25. Learning Arabic is necessary because people surrounding me expect me to do so.
26. I consider learning Arabic important because the people I respect think that I should do it.
27. If I fail to learn Arabic I'll be letting other people down.
28. I have to study Arabic, because, if I do not study it, I think my parents will be disappointed with me.
29. Studying Arabic is important to me because educated people speak Arabic.
30. Studying Arabic is important to me because other people will respect me more if I have a knowledge of Arabic.
31. Studying Arabic can be important to me because I think it will someday be useful in getting a good job
32. Studying Arabic is important because with a high level of Arabic proficiency I will be able to make a lot of money.
33. Studying Arabic is important to me because I would like to spend a longer period living abroad (e.g., studying and working).
34. I study Arabic in order to keep updated and informed of recent news of the world.
35. Studying Arabic is important to me in order to attain a higher social respect.
36. Studying Arabic is important to me because it offers a new challenge in my life.
37. I have to learn Arabic because without passing the Arabic course I cannot graduate.
38. If I make more effort, I am sure I will be able to master Arabic.
39. I believe that I will be capable of reading and understanding most texts in Arabic if I keep studying it.
40. I am sure I will be able to write in Arabic comfortably if I continue studying.
41. I am sure I have a good ability to learn Arabic.
42. I like the atmosphere of my Arabic classes.
43. I really enjoy learning Arabic.
44. I am very interested in the values and customs of Arabic culture.

45. I find it difficult to work together with people who have different customs and values.
46. I feel excited when hearing Arabic spoken.
47. I find the difference between Arabic vocabulary and English vocabulary interesting.
48. I get nervous and confused when I am speaking in my Arabic class.
49. I am afraid that other students will laugh at me or think I am dumb when I speak Arabic.
50. I would feel uneasy speaking Arabic with a native speaker.
51. I am afraid of sounding stupid in Arabic because of mistakes I make.
52. I feel it is important to learn Arabic in order to understand more about the culture and art of its speakers.
53. I want to become similar to the people who speak Arabic.
54. I like the music of Arabic-speaking countries (e.g., pop music).
55. I like Arabic films.
56. I like TV programs made in Arabic-speaking countries.
57. I like to travel to Arabic-speaking countries.
58. I like meeting people from Arabic-speaking countries.
59. I would like to know more about people from Arabic-speaking countries.

The following statements were added to the post questionnaire for both treatment groups

I believe that WOOP will be helpful in maintaining motivation.

I believe WOOP can help me increase my motivation.

Appendix B

Weekly Motivation Measure

Vocabulary Quiz

Please write your name:

- First Name _____
- Last Name _____
- Class Section # _____

Please tell us how motivated you feel before taking this quiz by selecting a number from 1-6 with 1 being not motivated at all and 6 being highly motivated.

	1- not motivated at all	2	3	4	5	6- highly motivated
Currently, I feel...	o	o	o	o	o	o

Select the best matching English word below. سمك

- soup
- friend
- fish
- sweets, desserts

Select the best matching English word below. الطُّفولة

- childhood
- I remember
- individual (person)
- meat

Select the best matching English word below.كنت

- I was
- he reads
- he was

o he writes

Select the best matching English word below أسافر

o I travel
o childhood
o I memorize
o I remember

Select the best matching English word below لمبارح

o sweets, desserts
o before
o yesterday
o first

Please tell us how motivated you felt during the following times by selecting a number from 1-6 with 1 being not motivated at all and 6 being highly motivated.

	1- not motivated at all	2	3	4	5	6- highly motivated
After having finished this quiz	o	o	o	o	o	o
During vocabulary study and practice this week	o	o	o	o	o	o
Following vocabulary study and practice this week	o	o	o	o	o	o

Do you feel that applying WOOP has helped you maintain motivation to study vocabulary this week?

- o Yes
- o No

How has WOOP has helped you maintain motivation to study vocabulary this week?

_____

_____

Do you feel that applying WOOP has increased your motivation to study vocabulary this week?

- o Yes
- o No

How has applying WOOP has increased your motivation to study vocabulary this week?

_____

_____

Do you feel that applying WOOP has increased your Arabic vocabulary proficiency?

_____

_____

Did you do WOOP this week on your own?

- o Yes
- o No

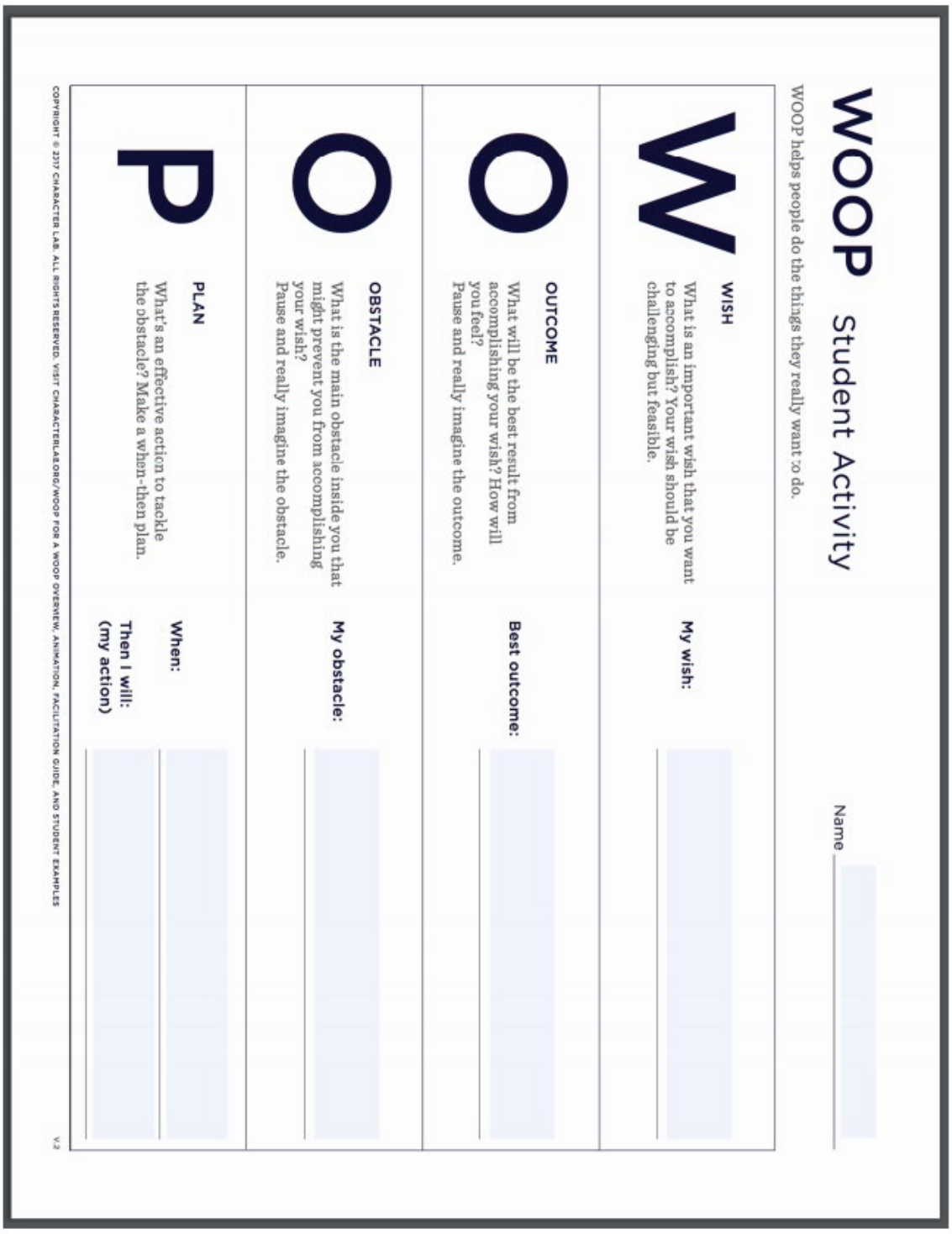
Q15 How many times did you do WOOP this week?

_____

Appendix C

WOOP Training

This and other training materials can be found at https://woopmylife.org/



WOOP Student Activity

Name

WOOP helps people do the things they really want to do.

W **WISH**

What is an important wish that you want to accomplish? Your wish should be challenging but feasible.

My wish:

O **OUTCOME**

What will be the best result from accomplishing your wish? How will you feel?
Pause and really imagine the outcome.

Best outcome:

O **OBSTACLE**

What is the main obstacle inside you that might prevent you from accomplishing your wish?
Pause and really imagine the obstacle.

My obstacle:

P **PLAN**

What's an effective action to tackle the obstacle? Make a when-then plan.

When:

Then I will: (my action)

V.2