Application of a Self-Regulation Framework in an ESL Classroom: Effects on IEP International Students

Claudia Mencarelli
Brigham Young University

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Application of a Self-Regulation Framework in an ESL Classroom:

Effects on IEP International Students

Claudia Mencarelli

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

Master of Arts

Dan P. Dewey, Chair
Benjamin McMurry
Troy L. Cox

Department of Linguistics
Brigham Young University

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ABSTRACT

Application of a Self-Regulation Framework in an ESL Classroom: Effects on IEP International Students

Claudia Mencarelli
Department of Linguistics, BYU
Master of Arts

The present mixed methods study looks at the impact of a specific self-regulatory framework (WOOP) developed within the domain of mental contrasting with implementation intentions (MCII), and its effects on the self-reported self-regulation of learners in an intensive English program in the United States over the course of one 14-week semester. The research, which includes a total of 187 participants, compares self-reported self-regulation between students who used the framework and those who did not, and the impact the tool has on the different proficiency levels involved in the study. Furthermore, following a sequential explanatory design, the study aims to examine the participants’ impressions on the value of this self-regulatory strategy. The quantitative data show that, despite the lack of significant difference between groups, there are meaningful differences across levels of proficiency. Individual interviews with select participants also reveal a general acknowledgement of the value of goal setting and planning in language learning, whether via MCII or not. In summary, MCII and a focus on self-regulation instruction appear to be beneficial in the bigger scheme of ESL learning and teaching.

Keywords: self-regulation, mental contrasting, MCII, WOOP, intensive English program, ESL
PREFACE

This manuscript is being prepared to be submitted to TESOL Quarterly (TQ). The journal requires all submissions to adhere to the formatting guidelines provided by the 6th edition of the *American Psychological Association*. Furthermore, specific word requirements guide the submission of full-length articles for publication with TQ. Such requirements include a 200 word limit for the abstract and a 8,500 word limit for the manuscript itself (including references, notes, and tables). We understand that this present manuscript does not meet those criteria at the moment, but it will be adjusted later on to meet the expectations.
ACKNOWLEDGEMENTS

First and foremost, I would like to express my gratitude and love for my parents, Carlo and Elisabetta, who have believed in me, in my dreams, and in the importance of my higher education from the very start, making more sacrifices than I am aware of to allow my wonderful sister and me to always have access to the best opportunities in life. They are a constant source of motivation and inspiration to me, so this thesis is dedicated to them. At the same time, I recognize the inestimable value of all my amazing family and friends around the world that, throughout the years and despite the distance, have loyally offered me support, strength, and laughter.

With the same gratitude I acknowledge the blessing of working with the incredible professionals in my committee: Dan Dewey, whose mentorship has guided me throughout my Master’s program, embodying knowledge, positivity, kindness, and patience; Ben McMurry and Troy Cox, whose precious feedback and advice have proven critical in many instances; and Dennis Eggett, for his much-appreciated assistance in the whole statistical data analysis process.
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Introduction

Since studies have shown that self-regulation is among the most important features in allowing individuals to successfully reach their goals in their respective fields (Houssais, Oettingen, & Mayer, 2013; Oettingen, Kappes, Barry, Guttenberg, & Gollwitzer, 2015; Loy, Wieber, Gollwitzer, & Oettingen, 2016; Oettingen & Cachia, 2016; Marquardt, Oettingen, Gollwitzer, Sheeran, & Liepert, 2017) it is essential to better understand how it relates to language learning. This study aims to analyze a popular, newer self-regulatory framework (WOOP), developed within the domain of mental contrasting with implementation intention (MCII), in order to determine the effects that it has on ESL international students’ self-regulation. Considering that the MCII framework has only recently been applied to a language classroom environment, the purpose of this study is to advance applications and suggest implications that would be valuable for ESL practitioners, other educators, and self-regulation experts in helping students increase their self-regulation, as well as achieve their language goals and expectations.

Literature Review

What makes a good learner?

This question has long sparked the curiosity of a wide variety of researchers who have sought to shed more light on one very important topic - that is, how to successfully enable learners to become more effective, responsible, and self-sufficient in their studies through the use of appropriate learning strategies (Dörnyei & Ryan, 2015), which “include any thoughts, behaviors, beliefs, or emotions that facilitate the acquisition, understanding, or later transfer of new knowledge and skills” (Weinstein, Husman, & Dierking, 2000, p. 727). Despite personal differences among individuals, “one thing seems to be increasingly clear and that is that, across learning contexts, those learners who are proactive in their pursuit of language learning appear to
learn best” (Macaro, 2001), thus re-emphasizing the relevance of autonomy and responsibility (Holec, 1979). As a matter of fact, it is only through becoming autonomous learners that students would be able to succeed in both structured and unstructured instructional settings (Leaver, Ehrman, & Shekhtman, 2005).

Specific abilities and attitudes had already been explored by Naiman (1997) in his popular book, *The Good Language Learner*, which takes the reader through a variety of insightful observations of successful language learners and the techniques they implement to tackle both fluency and accuracy. Expanding on his ideas, Ehrman, Leaver, and Oxford (2003) pointed out that it is not just a matter of applying strategies, but of applying the most appropriate strategies in particular given contexts. Despite this clarification, still of relevant importance for this research are those strategies addressed by Naiman that claim that successful learners are able to: 1) actively approach tasks; 2) manage their affective demands; and 3) monitor their performance in the target language. Because of the strenuous and demanding nature of these tasks, it would be highly improbable for an individual to effectively implement them and follow through with them without a good dose of motivation, grit, and self-regulation.

Before getting into a discussion about these variables, let us clarify the academic interpretation for each of them. According to Mohammad and Jabbari (2012), motivation means “powering people to achieve high levels of performance and overcoming barriers in order to change,” while Duckworth, Peterson, Matthews, and Kelly (2007) defined grit as “perseverance and passion for long-term goals.” When it comes to self-regulation, Rothbart, Ellis, and Posner (2004) define it “as processes that serve to modulate reactivity, including fearful inhibition, surgent or extraverted approach, and the effortful control of behavior based on the executive attention system.”
Extensive research has been conducted on motivation, grit, and self-regulation in a wide variety of domains. Of the three, motivation is the one that has extensively been applied to the language learning field, as it has been considered an important variable to determine success and progress on the part of the student. Linguistic aptitude is definitely an important factor in students’ second-language acquisition skills, but it is not the only element that should be taken into consideration - that which influences and motivates the language learner has been found to be extremely significant and effective in the linguistic development of the student (Guthrie & Wigfield, 2000; Alizadeh, 2016). In other words, motivation plays a fundamental role in any kind of learning environment.

According to Dörnyei (2001), motivation is not only a trait that some individuals naturally have, but it is also something that teachers should strive to help their students cultivate. Dörnyei’s motivational teaching practice revolves around four important factors:

1. “Creating basic motivational conditions” (e.g., supportive environment in the classroom, and appropriate teacher behavior);
2. “Generating initial motivation” by increasing learners’ expectations and goal-orientedness;
3. “Maintaining and protecting motivation” by making the learning environment stimulating and enjoyable, as well as promoting learners’ self-confidence and autonomy.
4. “Encouraging positive retrospective self-evaluation” through motivational feedback and learners’ satisfaction.

As the second point emphasizes, motivation is initially generated by helping learners increase their expectations of success, and by pointing them towards effective goal-setting techniques. This suggests the importance of grit and self-regulation on increasing motivation, considering the focus these both place on goal setting and plan making.
Kelly (2017) claimed that, since research established grit to be a common characteristic of historical successful figures, it is essential for educators to help students develop this trait, just as much as other cognitive strategies and skills. Related to success and achievement, Duckworth et al (2007) found that the ability of an individual to reach difficult goals is not merely related to talent, but to “the sustained and focused application of talent over time.” Through planning and long-term goal setting, part of a classroom’s focus should be dedicated to the building up of motivation and grit, so as to encourage students to keep high expectations for their language achievements and to help them realize the power that lies within them.

When talking about grit, special attention should be placed on its close relationship to self-regulation. Quoting past research (Naiman, Fröhlich, Stern & Todesco, 1978), Kelly (2017) pointed to self-regulation as one of several key characteristics of a good language learner. After all, according to Dörnyei & Ryan (2015), “self-regulation refers to the degree to which individuals are active participants in their own learning.” Despite the fact that self-regulation and grit might often be found or used as synonyms, Duckworth and Gross (2014) made sure to clarify the similarities as well as the differences between the two terms. As a matter of fact, even though they both involve the defense of valued goals in the face of adversity, … where they principally differ is in the types of goals that are being defended, the nature of the “enemy,” and the timescale that is involved. Self-control is required to adjudicate between lower-level goals entailing necessarily conflicting actions. [...] In contrast, grit entails maintaining allegiance to a highest-level goal over long stretches of time and in the face of disappointments and setbacks. The alternative to exercising self-control is
indulging in an action that immediately satisfies a goal but is soon regretted. The alternative to grit is following a series of different superordinate goals in rapid succession (law school one month and medical school the next) or giving up on a superordinate goal because the means to the end of that goal have been blocked. It follows that self-control is more tightly coupled with everyday success, whereas grit is more tightly coupled with exceptional achievements that often take decades—or even an entire lifetime—to accomplish.

Because of the subtlety of these relevant differences, it is no wonder that self-regulation and grit are often mentioned and studied as interconnected variables while considering the development and progress of those individuals that are regarded as successful. But how could individuals master grit, thus reaching their life-long goals, if they first didn’t master their self-regulation in the achievement of their every-day goals?

It is important to point out and notice that it is very difficult to talk about motivation, grit, and self-regulation without taking goal-setting and planning into consideration. Because goals and plans have the potential of taking us from where we are to where we envision ourselves, it is no coincidence that they play a central role in the progress of any kind of learner.

Studies have considered the way that goal-setting can affect task performance in language learning settings – more specifically, the different effects that specific and difficult goals have on task performance, compared to generic, vague and easy ones (Griffée & Templin, 1998). For this reason, setting goals is not enough. According to the research, in order for learners to reach their highest task performance, goals should be specific and difficult, so as to stretch the students, and provide the necessary effective motivation. In addition to these attributes, O’Neill (2000)
highlighted the need for goals to be strategic, measurable, attainable, results-oriented, and time-bound (i.e., SMART).

When it comes to fostering and developing motivation in the setting and the achievement of short-term goals, highly remarkable and necessary to mention are also the studies that have been conducted on self-regulatory strategies. As explained by Brown (2019),

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

Given the importance of self-regulation and of being a proactive learner, it seems that a framework or mode for becoming more self-regulated would be valuable for second language learners. Two effective self-regulatory strategies are:

1. Mental contrasting, which pushes individuals to focus on their goal setting by, first, elaborating a desired future outcome, and then by connecting it to the negative aspect of their reality that they want to change. It is the realization of this gap that motivates the subjects to act (Duckworth, Grant, Loew, Oettingen & Gollwitzer, 2011; Oettingen & Mayer, 2002).

2. Implementation intentions, which focuses on goal striving (Duckworth, Grant, Loew, Oettingen & Gollwitzer, 2011; Gollwitzer, 1999). Because setting a goal does not guarantee
the achievement of that goal, the purpose of this strategy is that of helping people stay on track and complete whatever it is that they have set their minds to. This is accomplished by setting a goal-directed behavior connected to the occurrence of a specific situation or obstacle that might get in the way of one’s progress ("If x happens, I will respond with y!").

When combined together, these two self-regulatory strategies are known as Mental Contrasting with Implementation Intentions (often referred to as MCII), which “constitutes a synergistic strategy for self-regulated behavior change and is more effective than either MC or II alone” (Duckworth, Kirby, Gollwitzer & Oettingen, 2013). Indeed, as succinctly summarized by Brown (2019),

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

Within these MCII principles, essential to our discussion is WOOP (acronym for Wish, Outcome, Obstacle, Plan), a tool developed by Oettingen (2014) that includes aspects of both MC and II. WOOP is not only based on the science of motivation, but also on the idea that recognizing what is keeping us from fulfilling our wishes – our obstacle – can actually allow us to understand how to realize them.
People have different needs and aspirations in life – becoming more productive, balancing a better diet, or implementing a healthier routine. Regardless of what their purpose might be, MCII strategies, among which WOOP stands out, seek to help individuals develop their self-regulation and inner motivation, so as to achieve whatever goal is important to them. The purpose of and need for framework is well elucidated on the official WOOP website:

A common mistake when setting a goal is to indulge in fantasies about how great life will be after accomplishing it—without considering what’s currently holding us back. Mentally contrasting your hoped-for outcome with an obstacle that stands in your path is energizing. This prepares you to make a plan for when and how you’ll take action! (WOOP for Classrooms. (n.d.). Retrieved from https://characterlab.org/activities/woop-for-classrooms/)

According to this, then, WOOP is not merely trying to help people work towards a goal; rather, it invites us to stop fantasizing about, or idealizing, the future, and to draw energy and motivation right from the challenge that we will face in overcoming our obstacle. The challenge becomes an ally, rather than the enemy, since it is only through a clear evaluation of it that we can improve and reach our goals. Despite the popularity of both MCII and WOOP, there is still little research dedicated to the way MCII connects to language learning in a classroom environment, and more specifically, to the way it could help language learners build up their self-regulation, as they identify their wishes and as they overcome their learning obstacles through planning.

It would be of great value for ESL teachers to better understand how the MCII framework could be applied in an ESL classroom environment in order to achieve the conditions that Dörnyei (2001) identified as the four essential motivational teaching practice factors. In addition, with the development of their L2 Motivational Self System, Dornyei and Ushioda (2009) introduced the
concept of the “L2 ideal self, which refers to the representation of the attributes that someone would ideally like to possess (i.e. a representation of personal hopes, aspirations or wishes).” Thus, the application of WOOP to an ESL setting would help students gain a better grasp of what their L2 ideal self looks like, what they must achieve to get there, and what is stopping them from reaching their desired destination. Furthermore, WOOP would provide them with strategies that can allow them to make effective plans which will keep them on track and increase their self-regulation.

Research Questions

To gain more insight on the aforementioned topic, the objectives of this study can be summarized by the following research questions:

1. Does the application of the WOOP framework in an ESL classroom enhance self-reported self-regulation, which includes goal-setting and planning in language study?
2. What meaningful differences and similarities appear between proficiency levels in the effects of the application of the WOOP framework on their self-reported self-regulation scores?
3. How does the treatment group feel about WOOP at the end of the intervention?

Methods

In order to find answers to the above-mentioned research questions, we resolved to opt for a mixed methods approach, implementing a sequential explanatory design, thus utilizing qualitative analysis to build upon and expound on the quantitative aspect of our study. What follows is an explanation of the methods that were employed to gather and analyze both the quantitative and qualitative data.
Quantitative Analysis

A quantitative analysis was conducted to address our first two research questions. This section explains whom the participants were, the procedure used to collect the quantitative data, and how those data were subsequently analyzed.

Participants

All students at BYU’s English Language Center (ELC) are in a cohort of classes set up at the following proficiency levels: Novice High (NH), Intermediate Low (IL), Intermediate Mid (IM), Intermediate Mid Plus (IM+, meaning that in one or more skills, the L2 speakers are progressing to the next sublevel), Intermediate High (IH), and Advanced Low (AL). Although these can roughly be equated to the ACTFL proficiency scale levels (https://www.actfl.org/resources/actfl-proficiency-guidelines-2012), they are not official ACTFL ratings but rather something internal to the ELC. For the sake of the study, the four proficiency levels that were included in the research were the IM, IM+, IH, and AL levels.

Within each proficiency level, there are separate tracks, or cohorts of students. Six tracks were randomly selected to be part of the treatment group from each proficiency level. Special care was taken to ensure that each level was represented in both the treatment and control groups.

Students from both the experiment and control groups averaged 25 years of age (ranging from 17 to 58 and from 18 to 56, respectively), with a remarkable multicultural background variety, as summarized in Table 1.

Due to a few students opting out at the start or discontinuing over the course of the study, the participant numbers in the experimental and control groups were not equal, with 101 in the former and 86 in the latter. Additionally, Table 2 summarizes how many students belonged to each level depending on the group they were randomly assigned to.
Table 1. Nationalities in the treatment and control groups.

<table>
<thead>
<tr>
<th>Treatment group nationalities</th>
<th>Control group nationalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentinian (3), Bolivian (4), Brazilian (8), Chilean (5), Chinese (5), Colombian (3), Congan (1), Ecuadorian (3), French (2), Guatemalan (1), Haitian (2), Honduran (3), Japanese (16), Korean (2), Lebanese (1), Malaysian (1), Mexican (13), Peruvian (8), Portuguese (2), Russian (2), Salvadoran (2), Saudi Arabian (1), Spanish (1), Taiwanese (7), Thai (1), US citizens (3), Venezuelan (1).</td>
<td>Argentinian (2), Bolivian (4), Brazilian (11), Cape Verdean (1), Chilean (4), Chinese (4), Colombian (2), Dominican (1), Ecuadorian (1), Guatemalan (1), Haitian (1), Honduran (1), Japanese (13), Korean (8), Mexican (10), Mongolian (2), Paraguayan (1), Peruvian (6), Portuguese (1), Salvadoran (1), Spanish (1), Swiss (1), Taiwanese (1), US citizens (6), Venezuelan (1).</td>
</tr>
</tbody>
</table>

Table 2. Number of students in the different proficiency levels depending on the group.

<table>
<thead>
<tr>
<th>Level</th>
<th>Group</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>IM</td>
<td>C</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>12</td>
</tr>
<tr>
<td>IM+</td>
<td>C</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>31</td>
</tr>
<tr>
<td>IH</td>
<td>C</td>
<td>14</td>
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<tr>
<td></td>
<td>E</td>
<td>27</td>
</tr>
<tr>
<td>AL</td>
<td>C</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>13</td>
</tr>
</tbody>
</table>

*Data Collection*

Before the beginning of the 2020 Winter term, all ELC students were asked to fill out a Short Self-Regulation Questionnaire (Carey, Neal, & Collins, 2004), so as to assess everyone’s initial self-regulation. The reliability of the questionnaire ($\alpha = .92$) had already been proven by Carey et al. (2004), who checked its validity comparing it with the more established Self-Regulation Questionnaire ($\alpha = .91$; Brown, Miller, & Lawendowski, 1999), finding a correlation...
of $r = .96$. Despite this, an additional verification process was conducted to ensure its reliability for this specific ESL environment through JMetrik analysis (Cronbach Alpha = .87). For the remainder of this paper, the questionnaire will be referred to as SSRQ, and a copy of it can be found in Appendix A for reference.

In addition to completing the SSRQ, the tracks in the experimental group received instruction on how to use WOOP at the very beginning of the term, during an opening assembly. Throughout the term, the treatment group had a chance to apply the self-regulatory framework by completing slightly different weekly surveys. The purpose of these surveys was to provide the students in the treatment group with opportunities to regularly reflect on self-regulation strategies and to allow them to report on their experiences using WOOP (see Appendix B). While always requiring students to account for their weekly goal, each survey also targeted a specific WOOP principle for students to focus on each week - whether it was their desired outcome, the obstacle to their goal, or the plan to overcome that obstacle. The students were given the freedom to apply the framework to any skill they wanted. For example, a student’s goal might have been to read in English for 30 minutes a day because their outcome was to become a more fluent reader to prepare for the TOEFL. This student’s obstacle might have been a perceived lack of time during the day to accomplish their goal. To overcome this particular obstacle, the student might have specifically planned to use their time on the bus, while commuting to work or school, to read in English for those daily 30 minutes.

As a further incentive for completing these weekly assignments, students received supportive or corrective language feedback on their survey answers throughout the term. The completion of those assignments was followed up and facilitated through one of the participants’ courses, and the feedback was provided by one of the researchers of this study.
In addition to those recurring weekly prompts, for their last survey, the participants were also asked to briefly give their feedback on WOOP itself by answering these three questions: Have you used WOOP throughout the semester? Did you find WOOP helpful? Would you continue using WOOP in the future?

The control group received the same language instruction as the experimental group, but was not taught about, nor asked to use WOOP throughout the term. At the end of the term, all ELC students were asked to fill out the SSRQ again. Doing so gave us the opportunity to see whether the application of the WOOP framework had been helpful for the experimental group’s development of self-regulation strategies over time.

Qualtrics was used as the medium to administer both the SSRQs and the weekly WOOP surveys. In the initial and final questionnaires, the students were asked to input their answers to the prompts through a five-point Likert Scale (1- Strongly Disagree; 5- Strongly Agree), while the experiment group was able to give more open-ended responses in the weekly surveys, in addition to their Likert selections.

Data Analysis

To answer the first research question, we conducted a comparison of the control and experimental groups. To control for initial SSRQ levels, we conducted an ANCOVA including pre-SSRQ score as a covariate. Furthermore, since we wanted to determine whether results might vary depending on proficiency level (Question 2), we examined the interaction between group and proficiency level in the (mixed model) ANCOVA and followed up with Tukey post-hoc analyses so as to identify any possible meaningful differences between pairs.

Measures were taken to ensure the accuracy of the results prior to statistical analyses. Firstly, the scoring of reversed-polarity questions that were present in the SSRQ was reversed.
Furthermore, while analyzing the data, the results of those participants who had not completed either one of the SSRQ’s were deleted. Finally, the results of anyone that put the exact same value for each of the questions in either one of the SSRQ’s were also deleted, as it was assumed they hadn’t taken the questionnaire seriously enough so their scores wouldn’t be truly representative of their actual self-regulation.

**Qualitative Analysis**

Addressing Question 3, a phenomenological approach (Karlsson, 1993) was also adopted to analyze the qualitative data collected, with the purpose of gaining more insight on the experimental group’s experience with WOOP. Vignettes were subsequently chosen to represent the data gathered.

**Participants**

Relying on purposeful sampling and opting for an extreme and deviant cases sampling method (Etikan, Musa, & Alkassim, 2016), two students from each of the four levels participating in the study were selected to take part in individual semi-structured interviews. These individuals were identified after the final SSRQ scores were analyzed and compared to their respective initial responses, thus allowing us to determine the degree to which individuals varied in their self-reported self-regulation from pre to post testing.

As extremes of a spectrum, we identified students whose scores from the initial and final SSRQ reported the greatest increase within their respective level and who had reported positive feelings towards the intervention, as well as students whose scores from the initial and final SSRQ reported the greatest decrease in self-reported self-regulation and who had reported negative feelings towards WOOP. In addition to these extreme cases, the situations of students who had reported positive feelings towards WOOP but had also experienced a noticeable loss in self-
reported self-regulation between the two SSRQ’s were also of interest. These kinds of students, as well as those with the opposite result (that is, negative experience with the intervention, but noticeable gain in self-reported self-regulation), were also selected to participate for an individual interview. Furthermore, if any outliers stood out in the process of analyzing the correlation between the initial and final SSRQ’s of the treatment group, those participants were also added to the interview pool.

Questions

The participants of the semi-structured interview were asked to describe their experience with WOOP, after which the interviewers might have asked follow up questions, such as:

1. What did you like about using WOOP every week this semester?
2. What is something that you would have liked more help or instruction on with WOOP?
3. Was there something you did not like about using WOOP every week?
4. In general, do you think that WOOP was helpful for you? Why/why not?
5. Do you think you will continue to implement WOOP in your life? How?
6. Do you feel like you have become a more autonomous learner?

In addition, to maximize the reliability and validity of the analysis, two strategies were applied. First, member checking was utilized so as to give the participants the opportunity to confirm or discard what was reported regarding their respective interviews. No discrepancies were pointed out by participants, thus confirming that our participants accepted the descriptions of their responses as accurate. Second, different members of our research team verified the themes that were extracted from the analysis of the students’ responses. In other words, researcher triangulation (Archibald, 2016) was used to determine agreed-upon themes.
Results

Quantitative Data

In analyzing the quantitative data gathered through the SSRQ questionnaires, Table 3 shows that the level by group interaction was not significant \( F(3,140) = .12, p = .94 \). As this was the case, the emphasis of the data analysis was turned from the interaction of the variables to a separate and distinct examination of the two main effects, thus focusing on the differences in means within the experiment and control group, and between levels.

Table 3. ANCOVA results focusing on the interaction between the level and group variables.

<table>
<thead>
<tr>
<th>Effect</th>
<th>Num DF</th>
<th>Den DF</th>
<th>F Value</th>
<th>Pr &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial SSRQ</td>
<td>1</td>
<td>140</td>
<td>19.24</td>
<td>&lt;.00</td>
</tr>
<tr>
<td>Level</td>
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<td>140</td>
<td>4.34</td>
<td>0.01</td>
</tr>
<tr>
<td>Group</td>
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<td>140</td>
<td>0.18</td>
<td>0.67</td>
</tr>
<tr>
<td>Level*Group</td>
<td>3</td>
<td>140</td>
<td>0.12</td>
<td>0.94</td>
</tr>
</tbody>
</table>

The separate analysis of the group and level variables detected no significant difference between the experiment and the control groups \( F(1,143) = .20, p = .65 \). However, some significant and relatively noticeable differences between levels stood out \( F(3,143) = 4.35, p = .01 \).

Table 4 indicates that, averaging across both the experimental and control groups, the AL level is significantly different from the IM, IM+, and IH levels. Their means are indeed significantly higher than the mean of the AL level. The IM, IM+, and IH levels all increased in their totals from the initial SSRQ to the final SSRQ (IM = 2.13; IM+ = 1.94; IH = .71), while the AL level went down by 7.52.
Table 4. ANCOVA results showing the difference within the level variable.

| Level | Group | Estimated Marginal Mean | SE | DF | t Value | Pr > |t| |
|-------|-------|-------------------------|----|----|---------|-------|-------|
| IM    | 1.94  | 1.81                    | 143| 1.07| 0.28    |       |       |
| IM+   | 0.71  | 1.85                    | 143| 0.38| 0.70    |       |       |
| IH    | 2.13  | 1.95                    | 143| 1.09| 0.27    |       |       |
| AL    | -7.52 | 2.31                    | 143| -3.25| 0.01   |       |       |
| C     | -1.14 | 1.49                    | 143| -0.77| 0.44   |       |       |
| E     | -0.22 | 1.35                    | 143| -0.16| 0.87   |       |       |

In addition, running a Tukey post-hoc test allowed us to gain more information on where our significance lay. Since, to interpret eta squared values, it is required to move the decimal point two places to the right (Brown, 2008) to understand percentage of explained variation, in the present study we observe that 12% of the variance in self-regulation development (change in SSRQ) is associated with the main effect of the initial SSRQ (see Table 5 and 6).

The results included in Table 5 account for the partial eta squared values of our variables and for their respective confidence intervals, confirming that both the interaction of level and group, as well as the group variable, do not have a significant effect on our dependent variable (Level*Group $\eta^2 = .00$; Group $\eta^2 = .00$). On the other hand, in Table 6, the Tukey post-hoc test found significant differences with medium effect sizes for the level variable ($\eta^2 = .08$) and for the total scores of the initial SSRQ ($\eta^2 = .12$) that we had set as a covariate, with confidence intervals of 95% CI = [.01, .16] and 95% CI = [.04, .22], respectively.
Table 5. Results accounting for partial variation of the level-group interaction.

<table>
<thead>
<tr>
<th>Source</th>
<th>Partial Variation Accounted For</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Partial η²</td>
<td>Partial Ω²</td>
<td>95% CI</td>
<td></td>
</tr>
<tr>
<td>Initial SSRQ</td>
<td>0.12</td>
<td>0.11</td>
<td>0.04</td>
<td>0.22</td>
</tr>
<tr>
<td>Level</td>
<td>0.08</td>
<td>0.06</td>
<td>0.01</td>
<td>0.16</td>
</tr>
<tr>
<td>Group</td>
<td>0.00</td>
<td>-0.01</td>
<td>0.00</td>
<td>0.04</td>
</tr>
<tr>
<td>Level*Group</td>
<td>0.00</td>
<td>-0.02</td>
<td>0.00</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Table 6. Results accounting for partial variation of the two distinct variables.

<table>
<thead>
<tr>
<th>Source</th>
<th>Partial Variation Accounted For</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Partial η²</td>
<td>Partial Ω²</td>
<td>95% CI</td>
<td></td>
</tr>
<tr>
<td>Initial SSRQ</td>
<td>0.12</td>
<td>0.11</td>
<td>0.04</td>
<td>0.22</td>
</tr>
<tr>
<td>Level</td>
<td>0.08</td>
<td>0.06</td>
<td>0.01</td>
<td>0.16</td>
</tr>
<tr>
<td>Group</td>
<td>0.00</td>
<td>-0.00</td>
<td>0.00</td>
<td>0.04</td>
</tr>
</tbody>
</table>

The Tukey post-hoc adjustments with the p-values for tests of differences between the four proficiency levels are reported in Table 7. These elucidate the significant differences that are observed between the AL and IM levels [mean difference = 9.96; $t = 3.18; p = .01$], the AL and the IM+ levels [mean difference = 9.53; $t = 3.14; p = .01$], and the AL and the IH levels [mean difference = 8.37; $t = 2.77; p = .03$]. This contrast can be also visualized in Figure 1, which shows the pre and post test scores under the label *Gain* for each of the separate proficiency levels.
Table 7. Post-hoc results accounting for the adjusted p-values.

<table>
<thead>
<tr>
<th>Comparison</th>
<th>Level</th>
<th>Level</th>
<th>Mean Difference</th>
<th>SE</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>IM - IM+</td>
<td>0.43</td>
<td>2.83</td>
<td>140</td>
<td>0.15</td>
<td>0.99</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- IH</td>
<td>1.59</td>
<td>2.85</td>
<td>140</td>
<td>0.56</td>
<td>0.94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- AL</td>
<td>9.96</td>
<td>3.13</td>
<td>140</td>
<td>3.18</td>
<td>0.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IM+ - IH</td>
<td>1.15</td>
<td>2.75</td>
<td>140</td>
<td>0.42</td>
<td>0.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- AL</td>
<td>9.53</td>
<td>3.04</td>
<td>140</td>
<td>3.14</td>
<td>0.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IH - AL</td>
<td>8.37</td>
<td>3.02</td>
<td>140</td>
<td>2.77</td>
<td>0.03</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 1. Visual representation of the distinctions between the four proficiency levels.

The descriptive statistics of our study are also reported below, in Table 8. A visualization of these statistics is also provided in Figure 2.
Table 8. Descriptive statistics of the results gathered from the initial and final SSRQ’s.

<table>
<thead>
<tr>
<th>Group</th>
<th>Initial SSRQ</th>
<th>Final SSRQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>C 66</td>
<td>E 83</td>
</tr>
<tr>
<td></td>
<td>E 83</td>
<td>C 123</td>
</tr>
<tr>
<td></td>
<td>E 118</td>
<td>E 120</td>
</tr>
<tr>
<td>Mean</td>
<td>C 15.2</td>
<td>E 11.7</td>
</tr>
<tr>
<td></td>
<td>E 15.4</td>
<td>C 13.8</td>
</tr>
<tr>
<td>SD</td>
<td>C 92</td>
<td>E 77</td>
</tr>
<tr>
<td></td>
<td>E 77</td>
<td>C 155</td>
</tr>
<tr>
<td></td>
<td>E 144</td>
<td>E 147</td>
</tr>
<tr>
<td>Minimum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 2. Visual representation of the descriptive statistics of the initial and final SSRQ results.

To summarize, our quantitative analysis reported no meaningful difference between the control and experimental groups. Despite this, significant difference was detected within the proficiency level variable, especially in the comparison of the AL level with the other three. These results provide answers to our first two research questions.
Qualitative Vignettes

Addressing Question 3, the following vignettes are used to share the experiences of the specific participants in the experimental group that were identified to take part in the individual semi-structured interviews. The purpose of these interviews was to gain a better understanding of the students’ feelings towards using WOOP throughout the semester. In reporting what was shared, the vignettes have been ordered based on the interviewees’ proficiency levels at the time of the study, going from lower proficiency (IM) to higher (AL). Furthermore, within the four proficiency levels, the vignettes of the students who had reported a gain in self-reported self-regulation were placed first. Pseudonyms have been adopted to protect the anonymity of the participants.

Flora. During the semester in which the study was conducted, Flora was a first-semester ELC student in the IM level. From Peru, she moved to the United States about six months ago with the goal and dream of attending university here. Since Flora’s feedback on the intervention was positive and she showed the highest IM level gain in self-reported self-regulation from the initial SSRQ to the final one (z-score = 1.46), she was interviewed as one of our extreme cases.

Sharing about her experience using WOOP, Flora expressed her appreciation for the framework, as it not only helped her remember her goals more consistently, but it also reminded her of the reason why she wanted to learn English in the first place. She admitted that, at the beginning, she found the practice to be a bit boring, but she promptly changed her mindset and started applying the framework to her classes so as to make it more relevant and useful to her specific situation. One goal she had was to learn ten new academic words every week. With the help of WOOP, she felt capable and confident of her abilities to both achieve her goal and follow through on her specific plans to reach it.
The interview also highlighted Flora’s trust in the power and effectiveness of goal-setting. As a matter of fact, she often shared her conviction on the importance of goals as an essential way to improve in every aspect of her life.

**Joshua.** Joshua was selected for an individual interview as another extreme case. Among the IM level participants, he had already been at the ELC for two semesters. Joshua had not only shown the highest loss in self-reported self-regulation between the two SSRQ’s (z-score = 0.15), but he had also given negative feedback towards the end of the use of the intervention.

Joshua’s story is definitely different from that of the majority of the students at the ELC. Along with his wife and kids, he moved to the United States from Chile a little over a year ago because of the complicated social and financial situation in his home country. The move brought a lot of different difficult adjustments for his family, including his inability to practice his real profession as a safety engineer and settling for a university campus job. Furthermore, during the semester our study was being conducted, Joshua shared that the landlord who was renting his house in Chile had not been paying him, which only put extra weight on his family’s already difficult financial situation, thus aggravating his stress levels. For this reason, he decided to take a short break from studying English, which appeared to have helped him relieve the pressure he was feeling.

When asked to expand on his experience with using WOOP during the semester, he explained that his negative feelings towards the framework were merely connected to his personal situation at the time of the study. WOOP felt like additional work that he had to take care of on top of all his other problems, pressures, and responsibilities. Looking back on his experience from less stressful circumstances, Joshua recognized the importance of purposefully focusing on goals,
and the value of a tool like WOOP to remember and achieve them, adding that he would consider using it in his professional life for the structure it provides.

Lina. Lina moved to the U.S. from China 8 months ago, after completing a university degree, with the desire of improving her English skills. Although she is unsure of her future plans, she would like to attend an American university to either get another Bachelor’s degree or to work on her Master’s.

The semester of our study was her very first one at the ELC. As one of the IM+ level participants, her results were particularly interesting to us for two reasons. First, unlike almost all of our participants, her initial and final SSRQ scores showed neither gain nor loss (z-score = 1.07). Second, she was distinctly open and straightforward with her negative feedback on the framework.

In sharing her experience with WOOP during the semester, Lina expressed frustration with the feedback she would get after each weekly survey. Even though she recognized the value of the framework, this dissatisfaction was based on the fact that she didn’t think that a teacher who didn’t really know her well would be able to give her meaningful grammatical feedback from the few words and sentences she would have to write in the WOOP surveys. Furthermore, she shared that, culturally speaking, Asians are more reserved when it comes to talking about personal things such as goals and, for this reason, they would rather open up to people they feel already close to, or to someone who has already gone through similar experiences as them.

In addition, despite their helpfulness, Lina stated that, to her, the weekly surveys only felt like a waste of time and like an extra task that she would have to do during the week. Because she felt like she knew what her goal was, having a survey every week was too often for her. Crucial to this, though, was her view and definition of a goal: to her, goals are not easily reachable and they should normally only be changed by years or by seasons.
Jade. Another one of our first-semester ELC students belonging to the IM+ level was Jade. She moved from Korea about 7 months ago with the hope of applying to an American university and completing her higher education in the United States. In comparing her initial SSRQ scores with her final ones, we observed a rather high loss in self-reported self-regulation (z-score = -2.06), despite her very positive reaction to the framework.

While talking about her thoughts and feelings on WOOP, Jade admitted that it was initially hard for her to really understand the point of using it -- since achieving goals had been difficult for her in the past, she stated that she would usually avoid making specific plans to try to reach her goals. Putting aside her preconceptions, though, Jade diligently used the self-regulation framework during the semester. In the process of setting a new goal at the beginning of every week and in taking time to think about it and work on it during following days, she came to realize not only the importance of both setting goals and making plans, but also of learning how to set the right kind of goal and make the right kind of plan, thus getting a chance to improve her life in general. As a matter of fact, reflecting on whether the application of the framework has helped her become a more autonomous learner, she shared that she enjoyed the exercise so much that she decided to keep using WOOP even after the end of the semester to continue improving her life.

Leah. From Peru, Leah moved to the United States with the desire of improving her English so as to be able to attend university here. Leah is currently not enrolled at the ELC, but when our research was being conducted, she was one of our second-semester IH level participants. Her initial and final SSRQ values displayed a quite high gain in self-reported self-regulation (z-score = 1.13) in spite of the fact that, while completing the last weekly survey of the study, she had reported discontent with the application of the framework, claiming that it hadn’t helped her much and that she probably wouldn’t want to use it again.
During our individual interview, though, the feedback given by Leah was definitely more positive. As a matter of fact, she mentioned appreciating using WOOP for three main reasons: firstly, it helped her focus more purposefully on her goals during the week; secondly, it actually did help her improve and achieve her goals; and lastly, since she felt like someone was interested in her progress and she knew she would have to report on her goals, using WOOP encouraged her to work harder.

Concerning goal reporting, Leah stated that the surveys were too general, which, she thought, gave the students the way of completing a task without really having to focus much on it. From her point of view, it would have been more effective not only to have more specific follow up questions in the surveys (such as, Could you share with me something you learned this week while using WOOP?), but also to have a regular face-to-face interaction about goals with a teacher to increase students’ accountability.

Overall, she would use WOOP as a student again if it was offered at the ELC as a potential separate class.

Darla. Another one of our IH level students, Darla had just started attending the ELC when our study was conducted. In the United States for almost a year, she moved from Spain hoping and planning to gain her Master’s degree in either Linguistics or TESOL from an American university. From a quantitative data point of view, her situation was similar to Jade’s: she very much enjoyed using WOOP, but her SSRQ scores indicated a rather high loss (z-score = -1.67).

As she shared more about her experience with the framework during the semester, Darla emphasized the importance of keeping track of goals, considering it the best way to actually determine personal improvement, growth, and learning, and she recognized the rewarding reality of gradual goal achievement and success. In addition, Darla stated that she particularly appreciated
the opportunity to fill out the weekly surveys, which not only helped her be more specific with the whole goal setting approach, but also made her realize times in which she could have done more, thus allowing her to fully evaluate herself. In thinking about the current direction she would like her life to take, she also pointed out how powerful a beneficial tool like WOOP would be even outside of the ELC environment because, regardless of the area in which it was used, it could remind her of her goals and push her to work hard to reach them.

Interestingly, despite her conviction of the effectiveness of WOOP, Darla touched on the difficulty of being consistent with her self-regulatory efforts throughout the semester. Just like homework, she knew the value of applying the framework, but laziness occasionally got the best of her. Looking back, she wished she had put more effort in it and given it more priority during the semester, but she learned from her experience and manifested a renewed commitment to working on her goals.

**Micah.** Micah was a second-semester AL level student at the time of the study, and was also one of our most positive participants when it came to his feedback on WOOP. He moved to the United States from Haiti, and is currently preparing to take the ACT so as to apply and register for university. In addition to having had a positive experience with WOOP, Micah’s SSRQ scores showed a gain (z-score = 1.13) from his initial questionnaire to his final one.

When asked to expand on his thoughts about the framework, his response focused on the mental organization and structure WOOP helped him achieve during the semester. Time management and planning were two areas in which Micah recognized some good personal improvement. Furthermore, he added that important to him was the opportunity WOOP gave him to identify the obstacles that were keeping him from achieving his goals. Pinpointing those specific obstacles allowed him to not only be more aware of them but also more prepared to face them and
more determined to work towards his goals. What he thus came to realize was that obstacles were an integral part of growth and development, especially in second language learning, and that purposeful planning was necessary to overcome them.

Expanding on this same topic, Micah shared that, since he is the only one speaking English in his family and among his friends back home, an obstacle he identified was in the amount of time he would spend every day talking with them in his native language. There is obviously nothing wrong in communicating with loved ones from back home, but he noticed this would regularly take time away from studying and working on his English skills. Identifying this obstacle allowed him to make a specific plan to improve his time management, thus determining daily time slots dedicated strictly to English.

From a more critical point of view, Micah then shared that something that was difficult and confusing for him at first was understanding how to break down his bigger goal of speaking English fluently into more specific wishes.

Juana. Another AL level participant we interviewed was Juana. From Portugal, she was attending her second semester at the ELC so as to prepare to apply for university in the United States and get a degree in Communication Disorders. Juana’s results were, in a way, similar to Joshua’s: her SSRQ scores showed a loss in self-reported self-regulation (z-score = -0.82) but, even though the feedback she had given during the last weekly survey wasn’t very enthusiastic, her individual interview reported a more positive opinion on WOOP.

During the interview, she shared that she thought the idea of this framework was so valuable that, after the end of the semester, she decided to use something similar to it to continue keeping track of her goals, only adjusting the practice to her own personal preferences and needs. Indeed, she claimed to have felt empty without a tool that helped her record her goals, and wished
she had been taught about it in elementary school. If that had been the case, she stated it would have been easier for her to remember to consistently and regularly complete the weekly task, which at times felt like just another stressful chore on an already busy to-do list. Because of this, Juana admitted to not being completely focused or honest while filling out the surveys, and explained how she would have preferred having more time to think about and report on her goals, going from a weekly follow-up to an every-two-weeks survey approach with weekly encouraging reminders.

Furthermore, she added that she would have really enjoyed having more face-to-face interaction opportunities instead of only getting electronic feedback from the teacher she was reporting her goals to. In her opinion, this would have allowed her to feel more personally connected to the instructor, which consequently would have helped her perceive the surveys more as natural reports rather than stressful, mandatory assignments.

**Common themes.** From these insightful interviews with our participants, there are three common themes that can be highlighted. The following sections seek to describe them, by also providing direct quotes from our participants which illustrate each of the three themes discussed (Table 9).

**General positive attitude towards goal setting.** First and foremost, all interviewed participants recognized and underlined the value of WOOP as a useful tool to regulate themselves and to keep track of their goals and plans. It was interesting to note that at least three of them explicitly reported the autonomous decision of continuing to use WOOP after the end of the semester, and almost all of them communicated the willingness to use it again, whether it be for schooling or other areas of their lives. This underlines general positive attitudes towards goal setting that should not be overlooked.
WOOP as a stresser. Second of all, the ability to recognize the benefit and practicality of the framework hasn’t prevented most of the participants from looking at it, at one point or another, as a mandatory and often stressful task in their already busy schedules. Almost all of the participants relayed perceiving the task of reporting on their goals as extra work. In some cases, there were personal obstacles involved that made the self-regulatory assignment overwhelming for them. It follows that, among other reasons, some students’ positive feedback might be connected not only to the experiences they had with WOOP itself, but perhaps also to the extent to which they were willing to change their mindset towards it so as to use it in a way that was personally useful to them. Despite this and the negative responses they might have given in their last written survey, though, they were still able to recognize the value of the tool, as explained in the first theme.

Teacher involvement. Finally, a third theme that has emerged from the interviews centered on the role of the teacher involved in the follow up and feedback process who, in our case, was an author of this study and a teacher at the ELC. Despite this, since none of the tracks in the experiment group were being taught by this specific teacher, it appears that students would have appreciated reporting their goals to a teacher they knew well, rather than to someone they barely got the chance to interact with. The reasons behind this are fairly understandable: the participants could have received more meaningful feedback, as pointed out by Lina; and the whole task of reporting on their wishes, outcomes, obstacles, and plans would have felt more personal and comfortable, as explained by Juana.
Table 9. Student quotations connected to the highlighted common themes.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Student comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>General positive attitude towards goal setting</td>
<td>“I think the most important of that was that I can remember why I’m learning English.” (Flora, IM) “After [WOOP], I think set a goal and set a plan is really important, and I learned to set the right goal and the right plan. Every monday I can set new goals and I can think about the last week, so I can have a chance to improve my goal and improve my life.” (Jade, IM+) “I really think [WOOP] is such a good thing to keep track of your goals so that you can actually see improvement, because otherwise we don’t really notice whether we are improving or not. […] And it’s very rewarding when you set goals and work towards reaching your goals, and you realize that little by little you’re getting there.” (Darla, IH) “I think it is really important to identify your challenges, your obstacles, in order to overcome them. If you cannot recognize them, it will be very difficult for you, so I really like that when I’m trying to reach a goal, I need to pay attention to the obstacles that I may face, so that I can be more prepared to face them.” (Micah, AL)</td>
</tr>
<tr>
<td>WOOP as a stresser</td>
<td>“When I studying the last semester, my brain explode with different problem, and my priority was my family, and my job. I think my performance in the ELC last semester was not good. … All time was important for me, and when I have additional homework or work, is … my life, plus my problems, uuuuf.” (Joshua, IM) “For last semester I didn't feel is useful. It’s like one thing I have to do, but I don’t want to do it. […] I think WOOP is very helpful for me to remind me something, but there are a lot of things we have to do for each day or for each week.” (Lina, IM+) “International students have a lot of homework to do, and a lot of things to figure out, even to adjust to a different culture. […] The problem is that people are just not used to having plans and writing them down. They see WOOP as a mandatory task or assignment. It adds more stress instead of helping.” (Juana, AL)</td>
</tr>
</tbody>
</table>
| Teacher involvement                | “I think if the teacher who use WOOP, she or he has to be familiar with the student, because if they knew the student well, they can give valuable feedback, right? If the teacher didn’t know the student, they cannot give you any suggestion through a few words or a few sentence. So I think if a teacher can use WOOP with their students, I think it is more valuable in
the future to give the students more suggestion to improve themself.”
(Lina, IM+)

“I think it would be more helpful if they can focus a little more in the
students, asking, What are those things that you learned? Could you share
with me? [...] I would love to interact with my teacher and they can see if
I’m really progressing.” (Leah, IH)

“One thing to improve is to make [WOOP] more personal, have a more
personal relationship with the students [...] so it feels more natural and not
like a task.” (Juana, AL)

*All quotes are reported as shared by learners in the interviews. Any changes are indicated in
brackets.

Discussion and Implications

The purpose of this study was to determine whether the application of the MCII framework
via WOOP in ESL classrooms could enhance students’ self-reported self-regulation and whether
significant differences appeared between the distinct proficiency levels within the experiment
group. Additionally, our research aimed to shed more light on the thoughts and feelings of the
experimental group towards the intervention received. Our quantitative and qualitative data
provide insight and evidence to answer our research questions. Thus, a possible interpretation and
discussion of the results reported in the Method’s section can be found below.

The results suggest that giving ESL students the opportunity to practice using a self-
regulatory framework such as WOOP generally allows them to improve in their ability to self-
regulate and to remember and achieve their language goals. Despite this, a significant difference
between the experiment and control groups of our study in their ability to self-regulate hasn’t been
detected.

To account for that, we believe it necessary to point out three key factors that might have
had an impact on our results. First and foremost, as the data was collected in just one semester, the
amount of time that was given to students to become familiar with the framework and get into the
habit of regularly using it was limited. A lengthier study might have allowed for more time for learners to practice what they were taught about self-regulation and for any differences between the experimental group and the control group to develop and give us more insight on the effectiveness of the framework.

Second of all, the participants in the experiment group received direct instruction on how to use the framework only once, at the beginning of the semester during an assembly, for which a few of them were also absent. Despite the weekly feedback they would get, it was clear to see that the whole process of effective goal setting and planning was commonly troublesome, especially because it was new and unfamiliar to many of them. A frequent misunderstanding revolved around the nature of the goals the participants would set: instead of focusing on short-term, more specific ones, they would often focus on the bigger, long-term goals they had. It would have been helpful to give the students the opportunity to receive more instruction on how to break down bigger goals into smaller and more measurable ones. Perhaps receiving an introduction to and an explanation of the framework in class would have allowed the participants to have the chance to ask for clarification right off the bat, and it would have been a more effective way to review the how of WOOP throughout the semester.

Along with this last point, the lack of active participation of the students’ own teachers in their goal setting and planning is a third factor we believe was impactful. As highlighted by a few of our individual student interviews, having more of a personal relationship with the teacher they were receiving feedback from appeared to be important and desirable for a successful goal report. This suggests that the results would have possibly been different if the weekly surveys had been held in class with a teacher present, and the feedback had been given in person, perhaps during that teacher’s office hours. In a meta-analysis of interventions designed to promote social and
emotional learning in educational settings, Durlak, Weissberg, Dymnicki, Taylor and Schellinger (2011) found that such interventions were more effective when led by regular classroom teachers than by research staff or school administrators. Although these were not all labelled self-regulation studies, most would fall under the umbrella of self-regulation research. It is possible that a similar effect for teachers could be seen in a replication of the current study. However, one might also ask if the active participation of a teacher in his or her students’ self-regulation processes goes against the whole idea of their becoming more self-regulated.

Whether administered by the students’ own teachers or by an external instructor, our qualitative data suggests the need of a revision of our weekly survey questions, as mentioned by Leah during her own individual interview. Having more specific follow up questions in the surveys might have allowed us to shrink the gap between the at-times contradicting feedback that was given in the last survey and the face-to-face interviews. According to the principle of social desirability bias (Grimm, 2010), our participants might have displayed a more positive attitude towards the use of WOOP during the individual interviews so as to provide more desirable responses for the researcher who was asking them questions. For this reason, a revision of our survey questions might yield more accurate data.

One final point we would like to make in connection to this first part of our discussion concerns the difference between statistical significance and overall meaningfulness. As discussed, from a purely statistical point of view, differences between groups were not significant. Despite this, if we analyze patterns of change in self-regulation in both the experimental and control groups, we can notice a movement in the direction towards self-regulation in those participants who received the intervention during our study. As a matter of fact, the experimental group showed an overall gain of 1.14 from the initial to the final SSRQ, with 48 out of 83 individuals reporting
an increase in self-reported self-regulation. In contrast, the difference between the final and the initial SSRQ of the control group revealed an overall loss of 1.32, with 27 students out of 66 reporting self-regulation growth. Thus, if not from the perspective of significance alone, we may be able to claim that the intervention was indeed meaningful from an educational point of view, considering the positive movement it helped the experimental group to make towards self-regulation. This movement might be perceived as small, but it is there, and, from that standpoint, it merits further lengthier longitudinal research.

To put things into perspective, it may also be valuable now to consider other studies on self-regulation and to compare our results to theirs. This comparison is slightly challenging due to the fact the methods used in this research were different from previous studies on self-regulation. As a matter of fact, these studies either did not employ the SSRQ as their instrument to measure self-regulation change (Cleary & Zimmerman, 2004; De La Fuente & Cardelle-Elawar, 2011; Seker, 2015), or they utilized the SSRQ but only focused on determining the reliability of the questionnaire in a specific context, so no intervention was given (Potgieter & Botha, 2009; Chen & Lin, 2018).

One somewhat comparable study was conducted by Ahmad and Ahmer (2018), though noticeable differences are present. First of all, in their study, the researchers used the Self-Regulation Questionnaire (SRQ) instead of its short version. The SRQ and the SSRQ vary in the amount of questions they ask the participant (63 and 31, respectively) and the total amount of points obtainable (315 and 155, respectively), but they are equivalently reliable and are thought to measure the same construct. In addition to the SRQ difference, the Ahmad and Ahmer study used the Trafffinger learning model combined with the lottery card method instead of WOOP. Despite
the differences between this study and ours, some comparisons can be drawn that can help us gain a better understanding of our quantitative values.

Ahmad and Ahmar (2018) reported before and after the intervention and categorized scores into high, medium, and low values of self-regulation using means and standard deviations (much like z-scores, as discussed in Hardy and Bryman, 2009).

In our effort to compare our results to theirs, we sought to categorize our learners as low, medium or high self-regulators using means and standard deviations in a like manner. We found that, in our experimental group, there were fewer learners seen as low self-regulators (13 pre VS 11 post) and more as high (11 pre VS 14 post). In comparison, in the control group, even though the number of low self-regulators went down (12 pre VS 7 post), the amount of high self-regulators remained constant (12 for both pre and post-test).

This goes to show that, despite the lack of significance between groups, a positive movement towards self-regulation was indeed made by the experimental group, thus supporting our claim for the meaningfulness of the intervention from an educational point of view.

Aside from the lack of statistical meaningful difference between groups, significant differences in self-regulation have been observed between the different ELC proficiency levels involved in this study. Indeed, our results show that the implementation of the self-regulatory framework seemed to be relatively less effective at increasing self-reported self-regulation for the highest of our levels (AL).

A possible explanation for this could be found in the nature of the AL level itself. Since the AL level is the highest at this ELC, it is usually composed of three different types of students. The first type is those who haven’t officially been accepted by a specific American university yet, so they are taking classes to both work towards that goal and keep their visa status active. A second
category is those students who are repeating the level because they haven’t scored high enough on the TOEFL to apply for university here in the United States. Finally, the third kind of AL students are those who either have already been accepted by a university here in the U.S., or who have decided to go back home, and are thus “hanging out”, waiting for their future plans to unfold outside of the ELC.

This could bring us to draw some conclusions on the pre-existent lack of self-regulation in those individuals who weren’t able to get a satisfactory TOEFL score to apply for university. Additionally, a lack of motivation in those participants who had already been accepted to an American university or who were planning on going back home after the end of the semester could be assumed. These factors could have had an impact on that AL level overall performance.

On the other end of the spectrum, the IM level, which was the lowest in our study, appears to have reported the greatest gain in self-reported self-regulation from their initial to their final SSRQ, as well as the most significant difference compared to the AL level. This suggests that the application and direct instruction of a self-regulatory framework such as WOOP in an ESL classroom environment might be more effective with lower proficiency levels rather than with higher ones.

Worthy of consideration, though, is the option that, through the application of WOOP, some in the AL level might have gained an increased self-awareness of their own self-regulation and therefore graded themselves lower later on in the semester than they did at the beginning. Perhaps completing WOOP made them realize that they weren't as high in self-regulation as they thought they were. Again, a lengthier study with more detailed exploration of learners' use of WOOP might shed more light on the topic.
On a separate note, interesting to include in our discussion is also the topic of culture. As pointed out by Lina in her individual interview, some cultures might perceive goals as something personal. Indeed, the participant stated that, if she were to talk about her goals, it would be with her own family or with people she knew well due to the fact that, according to her, Asians are more reserved. In addition to that, Lina brought up the nature and perception of what constitutes a goal, which could vary depending on individuals’ different cultural expectations. On this very issue, even Oettingen noted differences in goal expectations as she arrived in the United States from Germany, stating how wonderful it felt at the beginning to have people assuring her of the possibility of achieving all of her dreams. This contrasted greatly with the caution and skepticism that were typical of a European perspective (Boyle, 2020).

Considering this point of view, is it even possible to conduct a study on goals and goal setting without taking culture into consideration? How deep of an influence does the type of culture an individual comes from (individualistic vs. collectivistic) have on the nature of goals the individual sets and feels motivated by? Oishi and Diener (2009) aimed to answer a variation of this question by examining the role played by the attainment of independent and interdependent goals “in the subjective well-being (SWB)” of students coming from both individualistic and collectivistic countries. Their results showed that the benefits of goal attainment depended both on the type of goal that was set (independent or interdependent) and by the culture of the participant achieving it (individualistic or collectivistic). This suggests that not only we should be sensitive to and aware of students’ goal cultural expectations, but also that framing goals in a way that is more meaningful to the participants might lead to higher motivation and stronger benefits for them. The correlation between culture and the use of self-regulatory frameworks in an ESL environment might be a fruitful area for future research.
The final note of our discussion focuses on the applications and implications of this particular study to TESOL instruction. Even though the topic of self-regulation is not necessarily connected to any specific teaching or learning strategy in the ESL classroom, the ability of a student to self-regulate is indispensable to develop the motivation and grit that, as previously mentioned, have been recognized as key factors for long-term linguistic development and success (Dörnyei, 2001; Duckworth, Peterson, Matthews, & Kelly, 2007; Gardner & Lambert, 1959; Kelly, 2017; Naiman, 1997; Naiman, Fröhlich, Stern & Todesco, 1978). Since that is the case, language teaching should be more frequently accompanied by self-regulatory interventions, especially with lower level learners.

Ideally speaking, though, neither the teacher nor the student should perceive this additional instructional focus in an already busy ESL classroom schedule as an onerous task that just feels like extra work for the both of them. It is evident from our qualitative results that it would be expedient to find a way to make the processes of goal setting and reporting less stressful. This could be achieved by turning the assignment into part of a weekly classroom routine that does not need to take more than ten minutes. Our findings suggest that, over time, a regular reflection and report on goals, outcomes, obstacles, and plans might increase students’ self-awareness and self-regulation. Another solution might be found in the way these self-regulatory principles are taught, that is, through a more seamless integration of WOOP prompts into the English language learning curriculum. For example, in a reading class, the students could be given a passage about self-regulatory strategies as a basis for a classroom discussion. Similarly, in a writing class, teachers might decide to have their students respond to weekly writing prompts connected to the topic of self-regulation, so as to raise their awareness. Perhaps instructors in an English language school
might even coordinate in order to implement a little bit of self-regulation instruction in each skill so as to make it an inherent part of the curriculum.

Furthermore, besides its primary function as a self-regulatory tool, WOOP could be a valuable asset in the English learning classroom to establish the linguistic wants of the students (Hutchinson & Waters, 1987). This would give teachers a way to know what is important to their own students, thus making their lesson plans more student centered. In addition to this, the process of working towards common goals would foster a stronger teacher-student relationship of trust and respect, contributing to a more positive and dynamic learning environment. Given that students indicated the importance of connecting with their own teachers when implementing MCII, future researchers might consider giving teachers the possibility to apply the framework in their own classroom so as to create more opportunities for meaningful language and self-regulatory feedback. This would also function well as a possible topic for some interesting action research, which allows instructors to “examine their own educational practice” (Ferrance, 2000).

**Limitations and Suggestions for Future Research**

One major, external limitation of our study was the unpredicted shift from face-to-face to online instruction due to the outbreak of COVID-19 in the United States during the semester in which our research was being conducted. Although we cannot be entirely certain of it, we believe this change might have had a negative impact on our participants’ self-reported self-regulation, as many ELC students found finishing their classes from home challenging. It would have probably been useful to include some feedback questions (either in the last survey or in the individual interviews) on the influence that COVID-19 had on the participants’ wishes, outcomes, obstacles, and plans.
Additionally, we need to recognize that the selection of our participants wasn’t truly random since, even if the tracks were randomly selected, the individual students were not. The selection was therefore nested within classes and levels. Even though this violates the independence assumption of linear regression, thus requiring the use of Hierarchical Linear Modeling (HLM) for the data analysis, the number of our participants wasn’t high enough to conduct an HLM, so ANCOVA was selected as our quantitative analysis method.

Thirdly, we also acknowledge the fact that the SSRQ’s were administered to both the experimental group and control group in English. This might have caused comprehensibility issues, especially on the part of our lowest level (IM). Alternatively, our highest level (AL) might have been more conscious of the language used in those questionnaires due to their higher proficiency. All this might have had an impact on the way their scores were reported.

For these reasons, future research might consider improving this current study by translating the initial and final SSRQ’s into the languages of the participants involved so as to ensure comprehension. In addition, as mentioned in the discussion section, a longer period of time dedicated to the data gathering, as well as in-class instruction on the how of the self-regulatory framework are suggested. Finally, a use of more specific follow up questions in the weekly surveys could yield more informative data.

**Conclusion**

The purpose of this study was to analyze a more recent self-regulatory framework (WOOP), developed within the domain of mental contrasting with implementation intention (MCII), in order to determine its effects on the self-reported self-regulation of 187 ESL international students in an American intensive English program over the course of 14 weeks. Our quantitative results have shown that nothing significant was detected between the experimental
and control groups, but within the four proficiency levels analyzed in our study, a meaningful
difference was observed while comparing the highest level with the others, especially with the
lowest one which reported the highest gain in self-regulation from the pre-test to the post-test.
Insights from individual semi-structured interviews with a few selected participants also
highlighted that, even though WOOP was often perceived as an extra source of stress, students
generally had a positive attitude and perception towards goal setting and planning. Furthermore,
most of these selected participants mentioned the importance of a more active teacher
participation, which would have been considered a more motivating factor in their weekly goal
report. Even though more research needs to be conducted on the topic, our findings support the
potential of MCII as a tool to increase students’ self-awareness and self-regulation; to give teachers
a way to know what is important to their own students and create more student-centered lessons;
and to strengthen teacher-student relationships, contributing to a more positive learning
environment.
References


Appendices

Appendix A - Short Self-Regulation Questionnaire (SSRQ)

Please answer the following questions by circling the response that best describes how you are. Remember, there are no right or wrong answers.

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Uncertain or Unsure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I usually keep track of my progress towards my goals.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. I have trouble making up my mind about things.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>3. I get easily distracted from my plans.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. I don’t notice the effects of my actions until it is too late.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. I am able to accomplish goals I set for myself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. I put off making decisions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>7. It’s hard for me to notice when I’ve “had enough” (alcohol, food, sweets).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>8. If I wanted to change, I am confident that I could do it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>9. When it comes to deciding about a change, I feel overwhelmed by the choices.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>10. I have trouble following through with things once I’ve made up my mind to do something.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. I don’t seem to learn from my mistakes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. I can stick to a plan that’s working well.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. I usually only have to make a mistake one time in order to learn from it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. I have personal standards, and try to live up to them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. As soon as I see a problem or challenge, I start looking for all possible solutions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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</tr>
<tr>
<td>16. I have a hard time setting goals for myself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. I have a lot of willpower.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18. When I’m trying to change something, I pay a lot of attention to how I’m doing.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19. I have trouble making plans to help me reach my goals.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20. I am able to resist temptation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>21. I set goals for myself and keep track of my progress.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>22. Most of the time I don’t pay attention to what I’m doing.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>23. I tend to keep doing the same thing, even when it doesn’t work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>24. I can usually find several different possibilities when I want to change something.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>25. Once I have a goal, I can usually plan how to reach it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>26. If I make a resolution to change something, I pay a lot of attention to how I’m doing.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>27. Often I don’t notice what I’m doing until someone calls it to my attention.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>28. I usually think before I act.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>29. I learn from my mistakes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>30. I know how I want to be.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>31. I give up quickly.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Appendix B - Weekly Survey Prompts

Week 1:
- What is your goal? Feel free to update your goal as many times as you want.
- What do you wish to accomplish as a result of your goal?
- What do you think might keep you from achieving your goal?
- What are you going to do to overcome that obstacle?

Week 2:
- What is your goal? Feel free to update your goal during the semester.
- Why do you want to work on this goal?

Week 3:
- What is your goal for this week?
- What obstacle would prevent you from keeping your goal?

Week 4:
- What goal do you have for this week?
- What plan do you have to accomplish your goal?

Week 5:
- What is your goal? Feel free to update this as often as you want during the semester.
- What would be the best outcome of fulfilling your wish?

Week 6:
- What is your wish?
- What is the main inner obstacle that would hold you back from fulfilling your wish?

Week 7:
- What is your wish for this week?
- What is your plan to overcome the obstacles you may have?

Week 8:
- What is your goal this week? Feel free to update it during the term.
- Why do you want to accomplish this goal?

Week 9:
- What is your weekly wish?
- What obstacle would keep you from achieving your goal?

Week 10:
- What goal do you have for this week?
- What plans do you have to fulfil your goal?
- Have you used WOOP throughout the semester?
- Did you find WOOP helpful?
- Would you continue using WOOP in the future?