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REFLECTION TO THE SUCCESS OF LANGUAGE LEARNING

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## **Abstract**

Becoming a successful language learner requires more than attending classes and memorizing vocabulary. It requires establishing clear goals, finding effective learning methods, and taking control of the learning process. Self-regulated learning (SRL) theory is important for language learning (LL) as it involves individual work and allows learners to take responsibility for their learning. SRL consists of three phases: forethought, performance, and reflection. While all three phases are necessary for effective learning, reflection is especially important for LL as it involves critical evaluation of learning strategies for successful language acquisition. While numerous studies have explored SRL strategies, there needs to be more focus on the reflective learning strategies (RLS) that language learners undertake. This study aims to explore the RLS used by language learners, how they assess the effectiveness of these strategies and the impact of reflection on their learning. 17 language learners studying different languages were involved in the study, and qualitative research methods were used to analyze their experiences. Using a thematic inductive analysis, nine RLS were found, with self-reflection, reviewing, and memorizing as the most mentioned. Five strategies for assessing the effectiveness of RLS were found, comparing goals with current progress being the most common. Additionally, the study found that learners saw reflection as significant in LL. Nine possible impacts of reflection on learning were identified, where identifying obstacles and retainability of knowledge were the most common impacts. The findings highlight the importance of encouraging learners to reflect on their learning processes and suggest that incorporating RLS into LL programs could enhance learning outcomes and provide insight into how learners can assess the efficacy of these strategies.

Keywords: reflective learning strategies, self-regulated learning, language learning

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SRL – Self-Regulated Learning  
RLS – Reflective Learning Strategies  
LL – Language Learning

## 1 Introduction

Speaking multiple languages has evolved into a superpower in this age of globalization. The ability to communicate in multiple languages is no longer a luxury but a necessity that sets one apart and paves the way to a brighter future (Ginsburgh et al., 2016). Mastering foreign languages is like embarking on a journey to new and exciting frontiers. It expands one's language proficiency, deepens their cultural literacy, and introduces them to diverse perspectives and ways of thinking.

According to a survey conducted in 2012 by European Union (Eurobarometer, n.d.), nearly 90% of EU individuals think learning a foreign language is highly helpful, and 98% think that teaching their children to speak many languages will benefit their children's future. These findings highlight the importance of multilingualism as a fundamental element of modern education, emphasizing the necessity of promoting and nurturing linguistic diversity in academic settings worldwide. Marconi (2020) states that, by gaining a deeper understanding of other cultures, students can become more active participants in the global arena and unleash the full potential of their intercultural skills, which can lead to a more harmonious and collaborative world where cross-cultural communication and innovative thinking are the norms.

The complicated tapestry of our world is woven with the threads of globalization, migration, and technological breakthroughs, leading to an increase in the number of people living in multilingual situations (Conway & Richards, 2016). The importance of learning other languages has grown as diversity has increased. Therefore, students acquire new languages for various reasons, including academic pursuits, professional progress, communication, cultural appreciation, and travel. Students can extend their horizons and better understand various viewpoints and lifestyles by learning a new language.

Unlocking the key to language proficiency lies in mastering effective learning strategies (Raooofi et al., 2013). Every learner must be responsible for their learning (Tomak & Seferoğlu, 2021), plan their learning, and employ special abilities to navigate varied learning environments because each learner differs from others in their abilities and how they learn best (Reinders, 2011). Troung (2021) claims that embarking on a language learning (LL) journey requires personal effort.

With determination and a self-starter mentality, one can harness the power of language proficiency. A practical approach to this individual learning is through the self-regulated learning strategy (Zhang & Zou, 2022), a holistic approach that encompasses planning, performance, and reflection (Song, 2017). "Self-regulation refers to self-generated thoughts, feelings, and behaviors that are oriented to attaining goals" (Zimmerman (2002), p. 65). This strategy allows language learners to unlock their full potential and maximize their language efficiency. A study conducted by (Lee & Witte, 2014) examined adult international students' English learning beliefs and their use of different learning strategies; findings suggested that understanding what kinds of learning strategies students employ is crucial for not just the students but also educators, administrators, and policymakers to promote and assist them to monitor their learning to become successful language learners.

Embarking on the journey of self-regulation in learning, there are three cyclical phases to navigate. The first phase, forethought, includes setting goals, planning strategies, and igniting self-motivation fueled by beliefs about learning and self-efficacy. The performance phase then takes center stage. Learners take control, observe themselves, and deploy their planned strategies through self-instructing, recording, and monitoring to uncover the reasons behind their learning experiences. Lastly, in the self-reflection phase, learners assess their performance against standards and react to their results with either a defensive or adaptive response, resulting in self-judgment and self-motivational beliefs (Zimmerman, 1986, 2002, 2008).

Language learning (LL) strategies are goal-oriented actions that can vary from person to person. Strategies must be adjusted according to the learner's characteristics, the learning environment, and the specific task involved. Self-Regulated Learning (SRL) is essential for coordinating the relationship between these factors and achieving successful learning performance (Zhao, 2016).

Reflection plays a significant role in the SRL theory (Upton & Hirano, 1983). Self-reflection is crucial for improving learning outcomes, motivating students, fostering learner autonomy, and improving memory (Chang, 2019; Chiao-Man Tsai, 2016). Regular reflection aids in learning, and with a few basic techniques, it may become a meaningful routine. Learning transforms the experience into new information and understanding; reflection facilitates this process by linking theoretical conceptualization and practical experience (Kohonen, 2001). It encourages students to grow and learn from their mistakes while supporting the growth mindset.

Reflecting on our affects, behavior, and cognition is crucial in processing and evaluating our accomplishments (Gläser-Zikuda, 2012).

In LL, reflection plays a crucial role in the self-regulation process. *Reflection* is the deliberate and purposeful act of thinking that focuses on solving problems in language teaching and learning. It entails not just a sequence of ideas but a sequential ordering in which the teacher and learner lean back on or refer to previously taught and learned knowledge (David and Kochappan, 2006). Most studies have focused on SRL strategies employed by language learners throughout their study process (Altay & Saracaloğlu, 2017). However, there is currently a lack of research examining the use of specific strategies with the main focus on language learners for reflection on their learning. The gap in the research is significant as it hinders a deeper understanding of the role of reflection in LL and the potential benefits it may bring to learners. Therefore, this study aims to explore and identify the specific learning strategies that language learners use for reflection, as well as to investigate the effectiveness of these strategies in enhancing LL outcomes and to examine the impact of reflection on LL.

In this study, the data is gathered from a sample of adult language learners to understand better the relationship between reflection and language learning outcomes, such as language proficiency and motivation. To achieve this aim, qualitative research will be conducted using semi-structured interviews. This research will contribute to the current understanding of the role of reflection in LL and provide valuable insights for language learners and teachers alike.

## **2 Theoretical framework**

This study is anchored in the Self-Regulated Learning (SRL) theory, which provides a comprehensive framework to explore the role of reflection in LL. While this research is specifically focused on the reflection phase, the theoretical framework will provide a detailed overview of all the phases of SRL theory. This is because the reflection phase is tightly linked to the success of the other SRL phases. Starting with a general description of SRL theory, the framework will then delve into research on SRL in the context of LL, focusing on identifying the features pertinent to LL. Finally, the focus will shift to the reflection phase, which will be the grounding rationale for this specific study.

### **2.1 Self-Regulated Learning theory**

SRL unravels the mystery of how individuals refine their abilities through a systematic and consistent process of self-improvement. The evolution of SRL can be traced back to the early days of educational psychology when scholars started to differentiate between SRL and metacognition (Boekaerts, 1988; Pintrich et al., 1993; Zimmerman, 1986, 1989). To influence a student's academic motivation and learning, self-regulation (self-regulated learning) refers to self-generated ideas, feelings, and behaviors that are planned and methodically modified (Schunk & Ertmer, 2000). Zimmerman (2002) mentions that self-regulation is not a mental capacity or a performance skill in the classroom but the self-directed process through which students convert their mental capacities into academic competencies. Self-regulated students differ from their passive classmates in actively seeking information and taking steps to understand it fully. Rather than being easily deterred by difficult study conditions, confused teachers, or complex texts, these students overcome obstacles and succeed (Nodoushan, 2012; Zimmerman, 1990).

According to Schunk and Zimmerman (2011), self-regulation involves setting goals, monitoring progress, and making adjustments based on feedback. This type of learning allows students to become more independent and motivated, as they can take ownership of their learning journey. Students are more likely to achieve their goals and reach their full potential by actively participating in the learning process.



Over time, the field has expanded significantly, with numerous publications and a growing body of conceptual development. This has resulted in the creation of several SRL models that have enriched the field of educational psychology, for example, models developed by Zimmerman; Boekaerts; Winne and Hadwin; Pintrich; Efklides; Hadwin, Järvelä, and Miller. Among the many SRL models available, the models by Boekaerts, Winne, and Zimmerman are particularly notable because they have been widely used and helped shape the field of SRL, making them essential figures in the ongoing research on this topic (Panadero, 2017).

Boekaerts developed two SRL models: a structural model and the Adaptable Learning Model, which evolved into the Dual Processing self-regulation model. The structural model divided self-regulation into six components organized around cognitive and affective/motivational self-regulation (Boekaerts, 1996). The Adaptable Learning Model is a dynamic theoretical framework to understand effective learning by incorporating diverse psychological frameworks such as motivation, emotion, metacognition, self-concept, and learning (Panadero, 2017), while the Dual Processing self-regulation model described two parallel processing modes: a mastery/learning mode and a coping/well-being mode. Boekaerts (2011) emphasized the critical role of positive and negative emotions in SRL. They described three different purposes for self-regulation: expanding knowledge and skills, preventing threats to the self and loss of resources, and protecting one's commitments. Boekaerts' work has primarily focused on understanding goals, motivation, and emotion regulation of SRL.

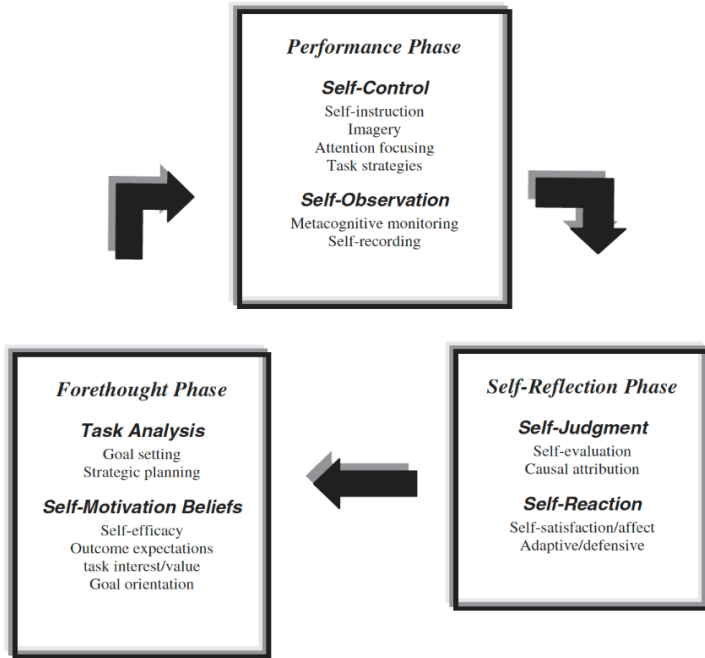
Winne and Hadwin's SRL strongly emphasizes metacognition and cognitive strategies for managing one's learning. The model by Winne (2011) recognizes self-regulated learners as active agents who monitor and regulate their learning through a recursive feedback loop of four linked phases: task definition, goal setting and planning, enacting study tactics and strategies, and metacognitively adapting studying. These phases are supported by five different facets of tasks - conditions, operations, products, evaluations, and standards (Winne, 1997) that are used to assess and monitor progress toward learning goals. Winne's model emphasizes using criteria and standards to set goals, monitor, and evaluate learning, which is aligned with research on self-assessment. Despite the lack of reference to emotions in the model, it recognizes the goal-driven nature of SRL and its effect on motivation (Panadero, 2017).

Zimmerman's Cyclical SRL model uses an ongoing series of feedback cycles that consists of three phases: forethought/planning, performance, and reflection. Rubenstein et al. (2017)

suggested that each of these phases influences and supports the next, and they are all interconnected. Research suggests essential relationships exist between variables within a given phase of SRL and that self-regulatory processes across different phases are closely related (Zimmerman, 2008). The forethought/planning phase involves key self-regulatory processes such as goal setting and strategic planning and motives for self-regulation such as self-efficacy beliefs, outcome expectations, task interest or value, and goal orientation. A study by Doménech-Betoret et al. (2017) conducted for Spanish secondary education students suggests that self-efficacy can play a significant role in enhancing student achievement and satisfaction and provides empirical evidence to understand better the mechanism that mediates these relationships and also the interconnectedness between forethought and the performance phase, as well as causal links between performance-phase strategic processes and self-reflection-phase outcomes (Yan, 2019). Additionally, self-reflection-phase feelings of satisfaction have been shown to predict forethought-phase sources of motivation, such as self-efficacy and task interest or valuing (Doménech-Betoret et al., 2017).

In this study, I use Zimmerman's cyclical model of SRL (*See figure 1*) because it provides a comprehensive framework for understanding the complex processes involved in SRL. Zimmerman's theory emphasizes the importance of reflection in the learning process, which makes it particularly relevant for exploring reflection in LL. Reflection is a critical component of LL, as learners must constantly monitor and evaluate their language use to improve their skills.

Figure 1. Zimmerman's Cyclical Model of SRL



*Note.* This image is extracted from the research article written by Zimmerman(2008)

In the subchapters that follow, I will describe these phases in more detail and explore how they relate to reflection in LL.

### 2.1.1 Forethought phase

The forethought phase of SRL refers to the foundation for action before actual performance can start. In this phase, students internalize a given issue or desired result and develop short- and long-term learning objectives and developmental structures that lessen the likelihood of the unknown materializing (Zumbrunn et al., 2011). There are two major classes of forethought phase processes: *task analysis and self-motivation beliefs* (Zimmerman & Kitsantas, 2005) (See Figure 2).

Segmenting the activity into manageable parts and selecting individual tactics based on past knowledge and experience is considered **Task analysis** (Panadero & Alonso-Tapia, 2014). It involves *goal setting and strategic planning*. **Goal Setting** refers to deciding upon specific outcomes of learning or performance (Tosi et al., 1991). Studies have shown that learners who set proximal goals for themselves, such as memorizing a list of words for a spelling test, or who plan

to use certain strategies, such as segmenting words into syllables, are more likely to experience academic success (Covington, 1992; Zimmerman, 1989; Zimmerman, 2002).

Two key elements affect goal setting: *assessment criteria and desired performance level* (Panadero & Alonso-Tapia, 2014; Panadero & Romero, 2014). Assessment is a benchmark for evaluating a person's competence (e.g., a language learner should demonstrate the ability to hold a fluent conversation). Uncertain criteria make it difficult to set goals since teachers may not always be clear about how performance will be assessed. According to research by Panadero and Jonsson (2013) the use of rubrics may mediate improved performance by (a) making the evaluation transparent, which may (b) lessen student anxiety, c) facilitate feedback, d) boost student self-efficacy, and e) encourage student self-regulation, all of which may indirectly contribute to better student performance. Students' desired performance level is greatly influenced by the desired level they set for themselves. This level interacts with the assessment criteria given by teachers. For instance, a language learner may know that to excel in the subject, they need to put in much effort. However, they might not put in the required effort if they lack interest in the language and do not see its value. As a result, their performance may not live up to their potential (Pintrich & de Groot, 1990).

Highly self-regulated learners divide the work into parts and define learning objectives for each portion hierarchically, with subprocesses and process goals linked to more distant result goals (Carver & Scheier, 2000; Zimmerman & Kitsantas, 2005). To reach those goals, master the skills, and perform optimally, self-regulated learners must devise strategies fitting the task and its setting, which is considered "*strategic planning*" (Weinstein & Mayer, n.d.). The use of self-regulation strategies must be continuously adjusted due to varying personal, behavioral, and environmental factors. It is because no single strategy works optimally for all individuals and tasks, and as skill improves, the initial strategy may become less effective. For example, in LL, a beginner may shift from focusing on pronunciation to grammar as their skill improves. Therefore, self-regulated learners must constantly modify their goals and choice of strategies (Salame & Thompson, 2020; Tosi et al., 1991; Zimmerman, 2000).

The standard against which to evaluate performance is *Self-motivation* (Bandura, 1977). Fueling oneself with motivation involves setting benchmarks for evaluating success; by linking self-acknowledgment to reaching specific targets, individuals incentivize themselves to persist until their achievements align with their established standards (Liu, 2015). On the other hand, self-

motivation is driven by students' beliefs about their learning abilities and the outcomes they expect to achieve as a result of learning (Schunk, 1995). Several essential self-motivational beliefs, including self-efficacy, outcome expectations, intrinsic interest/value, and goal orientation, are the foundation of goal formulation and strategy planning.

*Self-efficacy* is the belief in the person's capability to perform a task (Panadero & Alonso-Tapia, 2014; Zimmerman, 2000; Zimmerman & Kitsantas, 2005). (Bandura, 1977, p.193) claims that *outcome expectation* is a person's estimate that a given behavior will lead to certain outcomes. Bandura (1977) suggests that perceptions of self-efficacy and outcome expectations differ because while someone may be confident that a particular action will yield specific results if they have doubts about their ability to execute the required steps, such knowledge will not shape their behavior. Having a strong feeling of self-efficacy and repeated successes makes failures less damaging (Bandura & Watts, 1995). For instance, in LL, self-efficacy refers to the conviction in one's competence to become proficient. Outcomes refer to the envisioned results of that proficiency, such as landing a desirable job as a translator. For example, students who feel confident in their ability to learn a new language and expect to use it to communicate with native speakers are more motivated to engage in self-study and attend language classes.

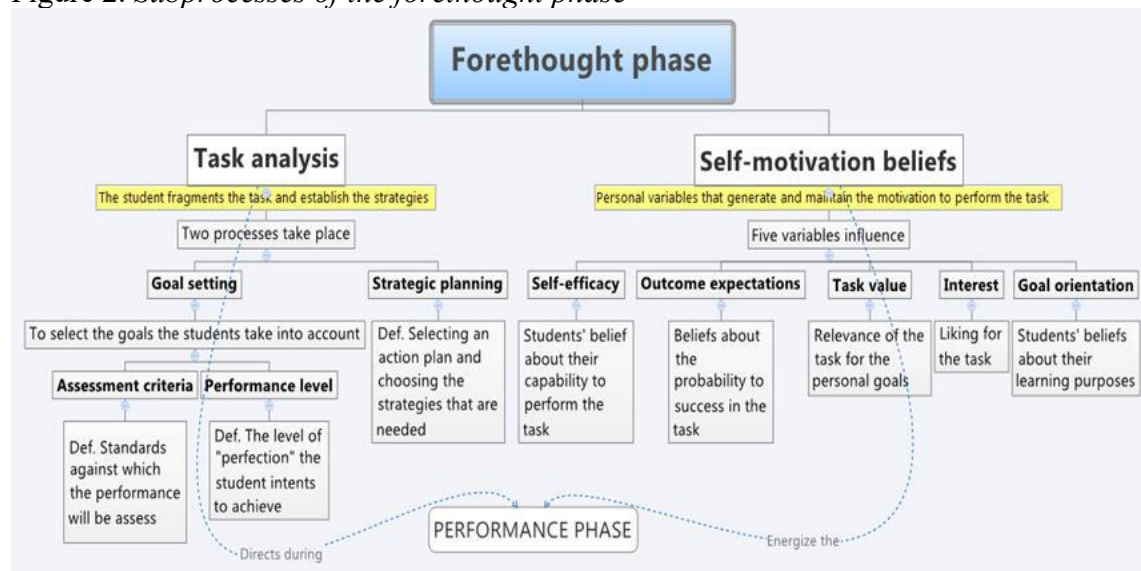
*Goal orientation* refers to the student's beliefs about the purposes of their learning (Panadero & Alonso-Tapia, 2014, p. 454; see also Pintrich & Groot, 1990). Zimmerman & Kitsantas (2005) described *intrinsic interest* as a form of fondness one develops for work due to its inherent worth, rather than as a means to attain anything else. In addition, intrinsic interest (Students' valuing of the task skill for its own merits (Zimmerman, 2002, p.68) in the task or subject matter and learning goal orientation (valuing the process of learning for its own merits (Zimmerman, 2002, p.68), can also increase self-motivation (Ames & Archer, 1988).

Research has consistently demonstrated the importance of the forethought phase in successful SRL (Wangid, n.d.; Pintrich & De Groot, 1990). There is a wealth of literature on the role of self-motivation and task analysis in SRL. Some critical studies in this area include Bandura, (1977) work on self-efficacy and outcome expectations, Covington (2000) research on goal theory and motivation to determine school achievement, Zimmerman & Schunk (1989) examination of strategy use, Schunk (1995) study of self-efficacy beliefs concerning student learning, motivation, and achievement, and Pajares (1996) investigation of self-efficacy and academic motivation.

Other relevant research includes Ames & Archer (1988) analysis of classroom goal orientation, the use of effective learning strategies showed that students who perceived an emphasis on goals in the classroom tend to adopt more effective study techniques, show a liking for challenging tasks, exhibit a positive outlook towards the subject and had a stronger belief that success comes from hard work.

The planning phase of SRL is important because it sets the foundation for successful reflection. Without proper planning, learners may struggle to identify areas for improvement or set appropriate goals for themselves (Schunk & Zimmerman, 1998). Understanding the Planning phase is crucial in developing effective self-reflection skills, which can ultimately lead to success in LL.

Figure 2. *Subprocesses of the forethought phase*



Note. This image is extracted from the research article written by (Panadero & Alonso-Tapia, 2014, p.453)

### 2.1.2 Performance phase

Understanding how people engage in practical learning requires understanding the performance phase of Zimmerman's SRL model. The two main parts of this phase are *self-control and self-observation* (See Figure 3). Self-control is using particular tactics or strategies chosen during the forethought/ planning stage. The ability to control one's own behavior and guide one's

own learning is referred to as *self-control* (Zimmerman, 2002). Task analysis and identifying practical ways to learn or carry out different task components are called "*task strategies*" (Zimmerman & Kitsantas, 2005). Zimmerman & Kitsantas (2005) gives an example; many professional writers purposefully stop their daily efforts in the middle of a thought because they have found that doing so improves their ability to start new sentences.

The self-regulatory "*imagery*" process is the process of conjuring up or recalling vivid mental images to aid learning (Zimmerman & Kitsantas, 2005). Similarly, when learning verb tenses, students can use imagery to associate each tense with a visual representation. For instance, they might imagine the present tense as a "snapshot" of the current moment, the past tense as a "movie" of a past event, and the future tense as a "crystal ball" predicting what will happen. These mental images can help them understand the nuances of each tense and use them correctly in conversation. It can help them understand and retain the material more effectively. "Occasionally, when I have been required to list the names of my colleagues from memory, I have found myself visualizing the hallways in which their offices are located, systematically moving past these offices, then picturing and naming the occupants (Paivio, 2013, p.3)." Memory, meaning, association, perception, and thought together make up mental imagery. The process of directing one's own learning and conduct through the use of verbal or written instructions to guide performance is known as "*self-instruction*" (Meichenbaum, 1977; Zimmerman & Kitsantas, 2005). Giving verbal signals, reminders, or directions to oneself is a part of this process, which also includes self-evaluation and performance monitoring. It can also involve making strategies to reach goals and utilizing positive self-talk to push yourself forward (Harris, 1990).

A student may utilize self-instruction in the classroom to remind oneself to pay attention during lectures or to memorize essential subjects for a forthcoming exam (Meichenbaum, 1977). Learning a new language also involves a mental checklist that a learner goes through actively. Initially, learners may rehearse new vocabulary and grammar rules verbally and mentally translate sentences from their native language into the new language. Meichenbaum (2014) claims that as they become more proficient, the mental checklist becomes more automatic, and they can communicate more fluidly without the need for conscious thought and effort. It is an effective instrument for encouraging self-instruction.

Additionally, Zimmerman and Kitsantas (2002) discovered that students who used self-instruction performed better on a writing task than students who did not. *Attention-focusing*

*techniques* enhance a person's capacity for concentration and sustained attention (Zimmerman & Kitsantas, 2005). These techniques are intended to assist people in overcoming attention span constraints or to improve the amount of effort they put into focusing on an activity. The Pomodoro Technique, a time management technique that divides work into intervals of generally 25 minutes, followed by brief breaks, is one illustration of an attention-focusing technique. Dividing lengthier work periods into more manageable chunks has been shown to boost concentration and focus (Cirillo & Info, 2006).

With relation to attention-focusing techniques or strategies used in LL associating new vocabulary with well-known ideas or visuals is a powerful way to learn a new language (Komachali & Khodareza, 2012). For instance an example by, Zimmerman (2002), after learning the Spanish term "pan" for "bread," a person who speaks English could picture a bread pan. Focus and attention can also be enhanced by creating a supportive learning environment, such as by eliminating distractions. Grouping similar words together can help with comprehension and memory as a task strategy. The use of imagery, self-instruction, attention focusing, and task strategies are a few of the main categories of self-control techniques.

On the other side, the self-observation component relates to a person's capacity to track and assess their own performance. Meta-cognitive monitoring and documenting one's behaviors, ideas, and feelings to acquire understanding and enhance performance are known as *self-observation* (Zimmerman & Kitsantas, 2005; Zimmerman & Paulsen, 1995). Self-observation aims to improve performance by raising one's level of self-awareness and understanding. For example, language learners can keep a language-learning journal to track progress, note areas of difficulty, and identify strategies that work well for them as a self-observation technique.

Self-observation further divides into meta-cognitive monitoring and self-recording. The necessity of selective focus during the performance phase of learning is emphasized by the self-observation category in Zimmerman's SRL model. People with self-regulation issues may find it difficult to set specific goals. They may feel overburdened by the amount of data that must be self-monitored, preventing them from modifying their tactics.

Students can identify any flaws, misunderstandings, or inefficiencies in their learning process by concentrating on a small number of responses. In order to do that, self-monitoring or metacognitive monitoring is required. One's cognitive tracking of personal functioning, such as the frequency of forgetting to capitalize words when writing an essay, is referred to as *self-*

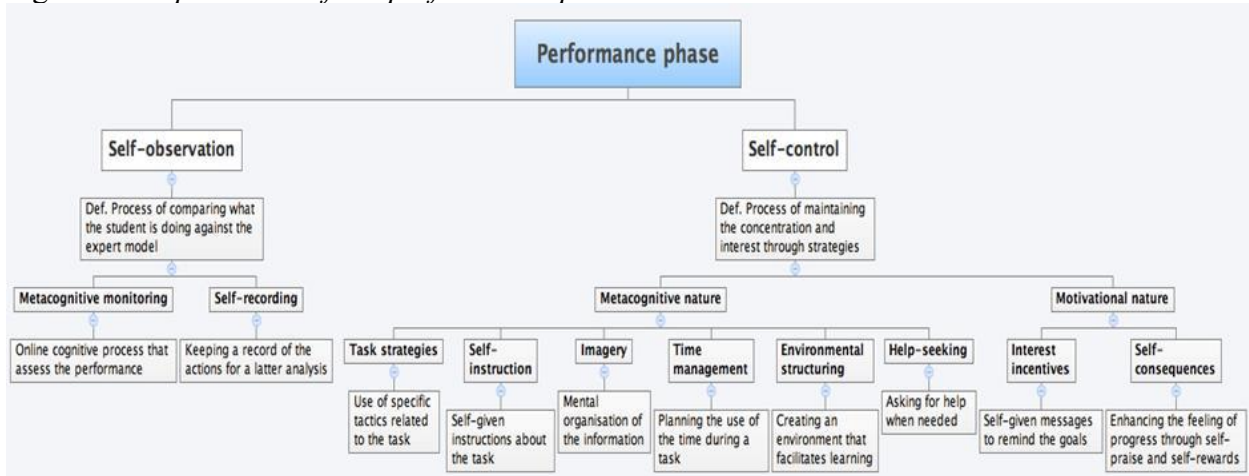


*monitoring*, a covert kind of self-observation (Zimmerman, 2002). With the use of the self-monitoring technique, students actively assess their own understanding and development. Students might acquire insight into areas affecting their academic progress in school by observing their processes or activities and setting realistic performance standards.

Additionally, self-monitoring serves as a tool for self-improvement by allowing students to focus their efforts, set and modify goals, and enhance their learning (Zimmerman & Paulsen, 1995). For example, language learners can keep track of the amount of time spent studying or practicing the target language each day, and set goals for increasing this time to improve language proficiency (Özkan & Tuncer, 2021). *Self-recording* is a valuable technique for assessing the standard and results of student learning by keeping a physical record of academic performance, such as written logs or audio or video tape recordings. This approach enables students to assess their progress, pinpoint areas for growth, and modify their study routines and approaches, resulting in more effective learning and improved academic performance (Zimmerman & Kitsantas, 2005). According to Zimmerman & Paulsen (1995), students can record performance details like time spent, the number of pages read, the level of comprehension attained, or test scores in a daily notebook. Self-recording is a formal form of self-monitoring that enhances self-efficacy and self-reaction beliefs (Zimmerman & Kitsantas, 1997).

Results of the study by Li et al. (2018) showed that the performance phase played a significant role in the process of SRL. The performance phase of the SRL model by Zimmerman is crucial because it allows learners to implement and monitor their strategies, leading to the successful completion of their tasks. As previously stated, the forethought phase is the first stage of Zimmerman's SRL cycle. Students set objectives, construct plans, and build methods for obtaining their intended outcomes during this phase, which helps students determine what they want to achieve and how they want to achieve it. The performance phase is the second phase. Students execute their plans and tactics during this phase, putting their knowledge and abilities into practice, giving students the opportunity to apply what they have learned, and evaluating their progress toward their goals. This success provides a basis for self-reflection and the ability to modify strategies for future tasks in the forethought phase.

Figure 3. Subprocesses of the performance phase



Note. This image is extracted from the research article written by (Panadero & Alonso-Tapia, 2014, p.455)

### 2.1.3 Reflection phase

In studies on academic self-regulation, two different forms of self-reflection phases have been examined self-judgement and self-reaction (Zimmerman, 2002), (See Figure 4). According to Zimmerman (1989), **self-judgment** refers to students who consistently compare their performance to a standard or objective. Self-judgment further divides into self-evaluation and casual attribution. **Self-evaluation** is the process of assessing feedback or comparing self-monitored data against some standard, such as prior performance or an absolute standard, using the evaluated feedback regarding missing test items following the teacher's grading system. (Schunk & Zimmerman, 1998; Zimmerman, 2002). Feedback is important to learners to grow and learn (Hattie & Timperley, 2007). **Casual attribution** describes the thought that led to one's mistakes or achievements, such as grades (Zimmerman, 2002). For instance, a language student who performs poorly on a vocabulary test can blame their low performance on their inability to use natural language. As it implies that they can only do something to increase their vocabulary, this might not be very encouraging. On the other side, if they blame not studying enough for their poor grade, they will be more driven to work harder on their studies in the future since they will think that putting in more effort will result in higher performance (Karande & Kulkarni (2005).

Many individual and situational elements impact attributes, including one's goal orientation, the activity's circumstances, and how well others performed on it; these attributional processes are essential to self-reflection because learners react badly and quit attempting to do better when mistakes are attributed to ability (Schunk & Zimmerman, 1998).

**Self-reactions** include behavioral consequences and internal processes, including goal-setting, self-efficacy views, and metacognitive planning (Méndez-López and Aguilar 2013; Zimmerman, 1989). Self- Reaction further divides into self-satisfaction/affect and adaptive/defensive. According to Zimmerman (1989), there are three distinct self-regulatory groups of self-reaction strategies (*Table 1*). In a triadic setting, all these three strategic reactions are self-initiated and supported by positive self-evaluations.

Table 1. *Three self-regulatory groups of self-reaction strategies*

Self-reaction strategies	Definition	Example
<b>Behavioral self-reaction</b>	Students aim to optimize their different learning experiences.	Self-administered praise or criticism.
<b>Personal self-reaction</b>	Students try to improve their individual learning processes.	Proximal goal resetting or rehearsing and memorizing.
<b>Environmental self-reaction</b>	Students attempt to improve the classroom environment better.	Structuring one's environment and asking assistance from other people.

**Self-satisfaction** involves how one feels about one's performance, including feelings of satisfaction or dissatisfaction and the effects that go along with them. It is significant because

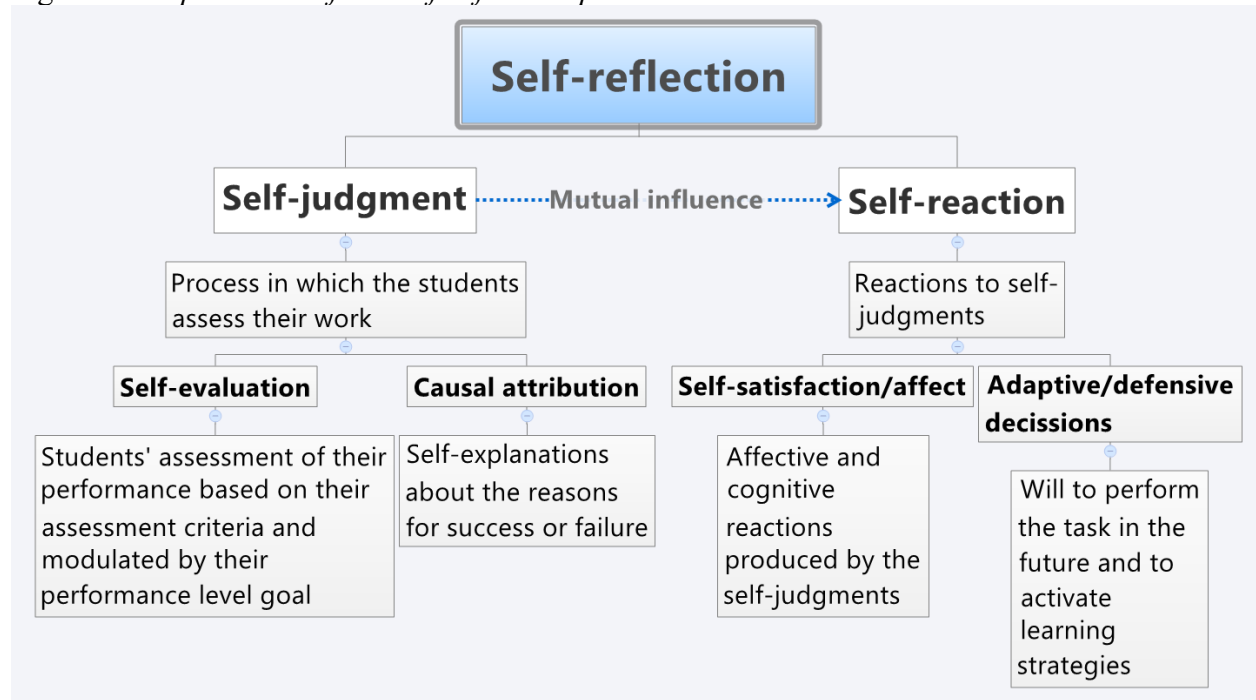
people tend to pursue actions that produce fulfillment and positive affect and avoid those that do the opposite, like stress (Bandura, 1991; Zimmerman, 2000).

The activity's intrinsic worth or significance impacts a person's degree of self-satisfaction as well. For instance, a language student who places a high value on speaking a foreign language will feel extremely disappointed and anxious if they perform poorly on a language skill test. However, a person who sees learning a new language as merely a pastime or passing fascination will be okay with poor exam results. When one's self-satisfaction is tied to achieving set goals, it drives individuals to take action and persist in their efforts through self-motivation. The motivation does not come from the goals but rather from the individual's self-evaluation of their actions and outcomes (Zimmerman, 2000).

*Adaptive or defensive* inferences act as a roadmap for self-improvement, which shows people how to modify their learning or task-performer style for greater effectiveness. They can instruct people on how to change their goals or pick better techniques, improving self-regulation. On the other hand, defensive inferences work as a barrier to shield the person from unpleasant emotions. However, these self-reactions, such as helplessness, procrastination, task avoidance, cognitive disengagement, and apathy, can impede personal development (Shao et al., 2020; Zimmerman, 2000,2002)

The reflection phase of Zimmerman's SRL model is important because it allows learners to evaluate their performance in the forethought and performance phases, identify areas of strengths and weaknesses, and adjust their learning strategies accordingly. Without reflection, learners may not be able to optimize their learning process and achieve their learning goals (Upton et al. 1983).

Figure 4. Subprocesses of the self-reflection phase



*Note.* This image is extracted from the research article written by (Panadero & Alonso-Tapia, 2014, p.457)

## 2.2 Self-Regulated Learning (SRL) in the context of studying languages

Language learning often involves a significant amount of self-study and self-guided learning. Self-regulated learning (SRL) has become an area of growing interest, and recent studies have highlighted the need for further research on SRL in second language learning (Rose et al., 2018). SRL can help students take control of their learning process and develop the necessary skills and strategies to succeed (Schön, 2017). This chapter describes the processes of SRL that have been studied particularly in the language learning context. It focuses particularly on grounding the importance of the reflection phase of SRL in studying languages.

### 2.2.1 Phases of self-regulated learning in language learning

A study (Seker, 2016) explores the impact of SRL strategies on foreign language achievement by investigating learner-reported use of SRL and its three main components: orientation, performance, and reflection. This study involved 222 undergraduate foreign language learners at a state university and found that although participants reported moderate to low levels of SRL use, it is a significant predictor of foreign language achievement and had significant correlations with language achievement. According to Lam (2015), a 15-week English writing course focused on the process of helping university students create self-regulatory skills through planning, organizing thoughts, and problem-solving techniques during the writing process. A study (Habók et al., 2022) aimed to investigate the relationship between self-regulated strategy use, attitude to English, and proficiency level among elementary and low-intermediate EFL learners. The findings have supported the idea that by using certain self-regulated learning strategies, EFL learners can become more successful and engaged in their learning. Further self-regulated method use can be advantageous for both elementary and low-intermediate learners. Another study by Eken & Gündoğdu (2021) which examined the use of LL strategies and SRL skills of university preparatory classes and private English language course students, found that there was a positive, high-level correlation between the LL strategies and self-regulation skills of the learners.

### 2.2.2 Self-reflection and language learning

As a part of the SRL process, self-reflection enables the learner to step back and evaluate their progress and understanding of the language (Seel, 2012). A study conducted by (Lee & Witte, 2014) examined adult international students' English learning beliefs and their use of different learning strategies, findings suggested that understanding what kinds of learning strategies students employ is crucial for not just the students but also educators, administrators, and policymakers to promote and assist them to monitor their own learning to become successful language learners. By reflecting on their learning, language learners can identify areas where they are struggling, as well as areas where they have made progress (Maher, 2017). Gläser-Zikuda (2012, p.3012) mentions that "self-reflection or introspection means self-observation and report of one's thoughts, desires, and feelings. It is a conscious mental process relying on thinking,

reasoning, and examining one's thoughts, feelings, and ideas. It can be difficult for language learners to form meaningful connections with their language experiences as they navigate the complexities of a new language. One promising solution to these challenges is reflection, which provides a powerful tool for language learners to engage with language experiences and for language teachers to facilitate deeper, more meaningful connections. A study by Soberg (2018) illustrates how reflective learning can enhance English language learners learning experiences by forming deeper personal connections to what they learn and how they learn.

Despite being widely recommended for years, the practice of reflection before, during, and after instruction is often overlooked in the classroom. Research has shown that reflecting on an experience can lead to more outstanding learning outcomes than simply experiencing it. Reflection appears to be viewed as a fundamental mental process that is used when there is no clear solution and the material is poorly structured or uncertain. Reflection may have a purpose, an outcome, or both. Thinking and learning appear to be tied to reflection (Moon, 1999).

Reflection can be beneficial for language learners as it emphasizes the importance of setting specific, challenging goals and developing strategies for achieving these goals (Conway & Richards, 2016; Halbach, 2000; Suraworachet et al., 2021). Boud et al. (1985, p.611) mention that "The skill of experiential learning in which people tend to be most deficient is reflection. One reason for this is that in our production-oriented society, little value is placed on reflection; indeed, it is often seen as nonproductive daydreaming, a waste of time. However, when you try to make sense of your experience, to put it in some perspective, to see what it is related to in the past and what it has to say about the present and future, you are doing the necessary background work for the development of theories, hypotheses, generalizations, principles, and explanations".

Encouraging self-reflection and metacognitive awareness can enhance language learning outcomes and support the development of lifelong learning strategies (Soberg, 2018). Further as mentioned by Syaepul Uyun (2022) it is important for educators to develop teaching strategies which meets the learners needs. Additionally, incorporating reflection strategies such as journaling, setting goals, tracking progress, and seeking feedback from others, can also help language learners to stay motivated, develop better learning habits, and deepen their understanding of the language.

### **3 Aim of the study**

The aim of this study is to investigate language learners' reflection on learning and how it contributes to SRL in the context of language learning. The study will investigate the specific learning strategies employed by language learners for reflection, the strategies used to assess the progress of the reflective learning strategies they use, and the perceived impact of reflection on their language learning experience and outcomes. The findings of this research will contribute to a better understanding of the role of reflective learning strategies in promoting self-regulated learning and promote the development of effective language learning.

The research questions (RQ) are as follows:

RQ 1: What reflective learning strategies do language learners take to reflect on their learning?

RQ 2: What strategies do language learners use to assess the progress of the reflective learning strategies they take?

RQ 3: How do language learners describe the impact of reflection on their learning?

### **4 Methodology**

#### **4.1 Participants and context**

17 university students, including both bachelor's and master's within the age range of 20-30, were selected to participate in the semi-structured interview sessions with a specific focus on the self-reflection strategies of language learners. The participants were students who had learned one or more of the following languages: English, Sinhala, Finnish, Chinese, and Tamil. The participants were from Bangladesh, Brazil, China, Finland, Germany, Kenya, Netherlands, Nigeria, Sri Lanka, Thailand, Turkey, and Vietnam. The inclusion of learners from diverse linguistic backgrounds aimed to achieve both an in-depth understanding of each individual and sufficient cross-validation among language learners regarding the use of reflective strategies. By including participants from different languages, the research avoids bias and ensures a broad perspective on self-reflection strategies among language learners. To reduce selection bias,



interview participants were selected from both those who had never been taught about self-regulation and those who had been taught about self-regulation previously.

## 4.2 Research methods

### 4.2.1 Data collection

The data collection method employed in this study involved conducting one-on-one interviews. To minimize response bias and allow for follow-up on interesting ideas and suggestions, a semi-structured interview format was utilized, as recommended by (Dörnyei (2007)). Prior to the interview, each participant was provided with an email containing interview questions (*Appendix 1*), an explanation of the interview format, and a consent form.

During the semi-structured interviews, in order to assess the extent to which students practiced self-regulated learning strategies while learning, a visually presented 5-point scale (*See Appendix 1, question 3*) was added to the third question of the semi-structured interview. I presented 10 self-regulated learning strategies chosen based on (Sebesta & Bray Speth, 2017; Zimmerman & Martinez-Pons, 1986) to the interviewers and asked whether they utilized these strategies in their daily studying. By using this method, participants were asked to rate how consistently they employed each self-regulated learning strategy mentioned, giving information about how much they actually put these strategies into practice on a daily basis. For each self-regulated learning strategy listed, participants indicated their level of use, with "strongly agree" indicating very often, "agree" indicating often, "neutral" indicating sometimes, "disagree" indicating rare use, and "strongly disagree" indicating never or no use.

The purpose of having this method employed in the third question of the interview was to determine whether the students were using any SRL strategies, either knowingly or unknowingly. The self-regulated learning strategies scale questionnaire is important in this study for several reasons. Firstly, it provides a standardized measure to assess participants' levels of self-regulated learning strategies. This is important because SRL is a complex construct that includes several different cognitive, metacognitive, and motivational strategies. Secondly, the SRL scale questions are particularly relevant to exploring the use of reflection in SRL. Because it is considered a key component of SRL as it allows learners to monitor their own progress, identify areas of strength

and weakness, and adjust their strategies accordingly. By including a measure of SRL strategies the researcher can gain a more nuanced understanding of how participants are using these strategies in their learning.

Finally, the use of the SRL strategies in conjunction with the interview questions allows the researcher to explore the use of participants' SRL strategies. While that question provides a standardized measure of self-regulated strategy use, interviews allow participants to elaborate on their experiences and provide more detailed information about their reflective learning strategies, including how and when they use them. Therefore, based on the SRL strategy scales used in ( Sebesta & Bray Speth, 2017; Zimmerman & Martinez-Pons, 1986) 10 self-regulated learning strategies were asked. This allows the researcher to quantify participants' self-reported use of these strategies, which can then be compared across participants and used to identify patterns and associations with other variables of interest.

Other interview questions considered topics such as reflective study methods for LL, the benefits of reflective study methods, assessing learning outcomes and progress, strategies for reflecting on LL, the role of reflection in improving LL, identifying areas for improvement in LL, adapting study methods based on reflection and the impact of reflection on achieving language learning goals (for interview questions, see Appendix 1). By collecting this data, I will be able to understand how the students have utilized these strategies, which will be beneficial in analyzing the transcribed interview data. The interviews were conducted in English and had an average duration of 15-30 minutes. They were carried out using the communication platform Microsoft Teams© and were recorded either in audio or video format.

#### 4.2.2 Data analysis

The analysis of data was done in two parts. In analyzing the ordinal data obtained from the Likert-Scale questions SPSS software was used and results were presented in graphical summaries (bar charts). This approach was intended to provide descriptive validity to the qualitative data. The open-ended answers to the interview questions were manually transcribed on Microsoft Excel using non-verbatim transcription, which involved the omission of laughter, background noises, verbal pauses, throat clearing, and the cleaning up of incomplete sentences. As described by Given

(2008), inductive coding was then used to analyze the 17 transcriptions, with codes derived from common keywords and patterns found in students' responses.

The transcripts of interviews were examined to ascertain the traits of students in terms of SRL. Thematic analysis, a qualitative analytical technique that discovers patterns and themes to answer research questions, was utilized to analyze the data (Foong et al., 2021; Nowell et al., 2017). Six steps make up thematic analysis, which enables researchers to create a flexible and practical strategy to obtain comprehensive and in-depth information (Caulfield, 2022). The procedures involve becoming familiar with the data, creating preliminary codes, looking for themes, going over themes, defining and labeling themes, and writing up (Foong et al., 2021, see also (Denzin, 2008).

Therefore a thematic inductive analysis was used as it entails going through textual material and finding and coding emerging themes within the data. The initial phase (inductive coding) involved familiarizing oneself with the responses and transcribing them into written texts. The second phase (thematic analysis) included generating initial codes by identifying patterns across each interview, categorizing the codes into themes without predetermined categories, and reviewing the themes. The student responses were subjected to open coding to produce codes. The key categories included general opinions about the learning strategies made by the students themselves. The theoretical framework of this study was taken into account when producing codes and the phases of thematic analysis by Foong et al. (2021) were followed. The coded categories were created during the organizing process and are shown in the results section. The frequency of the categories used in the interviews was also reported while discussing the results.

### **4.3 Validity, reliability, and ethical consideration**

Reliability, credibility, and validity are some factors to be concerned about while designing a study, analyzing results, and judging its quality (Cypress, 2017). As Mills et al. (1987) and Stenbacka (2001) the validity and reliability of the data cannot be determined using defined criteria in qualitative research. Trustworthiness and quality of the data collection and analysis process can be considered determinants of reliability and validity of qualitative research. During the interviews I conducted member checks here and there to summarize a participant's statement, allowing them to correct or affirm what he/she said. In order to ensure the credibility of my study, I conducted a

thematic inductive analysis of the transcribed data from the semi-structured interviews that I conducted with language learners on their reflective learning strategies. After categorizing the data, I worked to categorize themes and descriptors that emerged from the data.

To increase the validity of my findings, I cross-checked the data and interpretations both within and across each category of participants. Once the initial codes were created using the thematic inductive approach Foong et al., (2021), I grounded the codes into various categories of themes in order to find the reflective strategies the language learners use and the impact those reflective strategies have on their learning. A second coder was brought in to review the initial codes and investigate the themes that emerged. This coder was asked to review some of the transcribed materials, and any new themes and descriptors that they illuminated were acknowledged and considered in comparison with my own thematic analysis.

To ensure that my preconceptions and biases did not influence my analysis and to be reflexive, I bracketed my own knowledge and experiences related to SRL strategies, reflective learning strategies (RLS), and LL. Although I have had personal experience as a Chinese language learner for four years and later studied SRL, I worked to set aside my preconceptions and opinions during the study. Instead, I focused on truly listening to the participants and learning from their experiences and examples. Throughout the data collection and analysis process, I was vigilant of my own biases, preconceptions, and assumptions that might have influenced the study and reflexivity involved in examining my own judgments, practices, and belief systems. My goal of being reflexive was to identify any personal beliefs that might have affected the research incidentally.

Data collection was carried out in order to comply with the EU General Data Protection Regulation (Art. 13 and 14). As a result, participants in the interviews were given true information about the research, and their consent was obtained before they took part in the survey. Their anonymity, confidentiality, and privacy were all respected, and the collected data was only accessed by the research's principal investigator (me). Furthermore, to protect participants' privacy, the original names and/or any other identifiers were removed from the data analysis. Pseudonyms were consistently utilized and allocated to each participant by compiling a codebook with a list of participants and their corresponding pseudonyms to ensure confidentiality.

In terms of data storage, the interviews were recorded and transcribed accurately, and the transcripts were securely stored to ensure that they are not lost or damaged. The data was also stored in a pen drive as a backup system to ensure that the data is not lost due to technical failures

or other issues. The data analysis process included comprehensive reading and interpretation of the transcripts. Identifying patterns, themes, and categories that arise from data was the common step in this approach. The data were coded in order to identify certain concepts or ideas related to the research questions. In terms of reliability, test-retest reliability was conducted (see.4.3.1).

#### 4.3.1 Measuring the test-retest reliability

To assess the reliability of the interview data, the test-retest reliability technique was used (Feder, 2008). Test-retest reliability is a statistical technique for estimating measurement error components by repeating the measurement process on the same subjects under as similar conditions as feasible and comparing the findings (Feder, 2008). Here, I re-interviewed 10% of the participants to see their responses align with the first interview responses. So, initially we used 17 participants for the interviews, thus for validation we used 10% of the total participants, which is  $17 \times 0.1 = 1.7 \sim 2$ . So, two participants were selected randomly. In the context of surveys, test-retest takes the form of an interview-reinterview technique in which the survey instrument is conducted numerous times (typically twice) and the replies on each occasion are compared. Specifically, I assessed the level of agreement or consistency between the ratings provided by 10% of the interviewees across both interviews. (Table 2) provides a description of how the responses were categorized and (Figure 5,6 & 7) shows the comparison of the responses for all three research questions. This can help to determine the extent to which the ratings are reliable and consistent across different interviews and can be used to establish the validity of this research finding. Based on the comparison more than 65% were consistent responses and no inconsistent responses were found.

Table 2. *Test-retest reliability*

Consistent responses	Present in both interviews
Expanded responses	Present in second interview, but not in first
Narrowed responses	Present in first interview but not in second
Inconsistent responses	Yes/no in the first interview but no/yes in the second interview

Figure 5. Comparison of responses of participants across two separate interviews for RQ 1

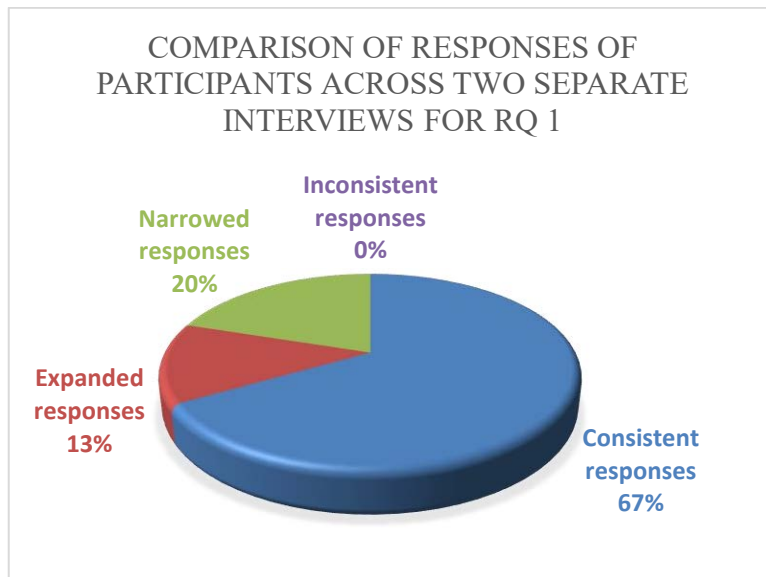


Figure 6. Comparison of responses of participants across two separate interviews for RQ 2

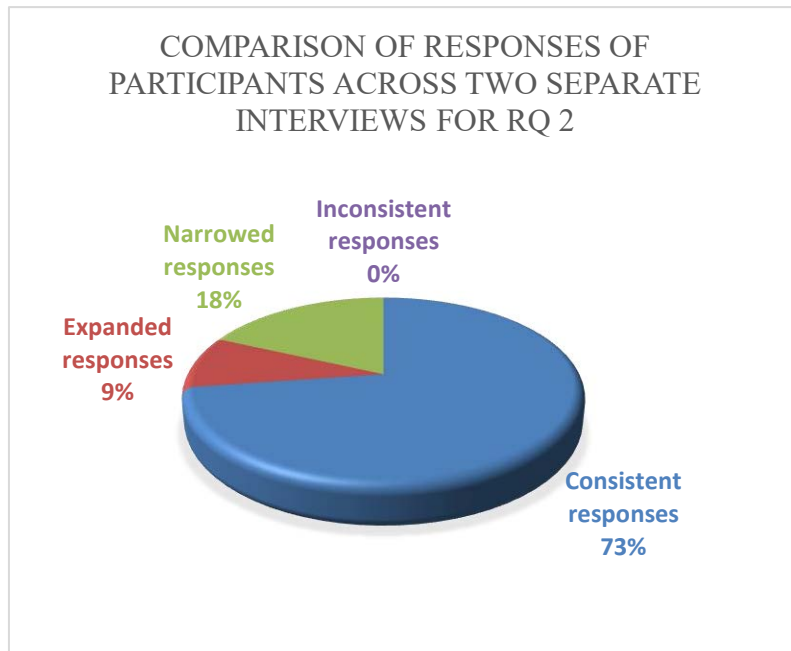
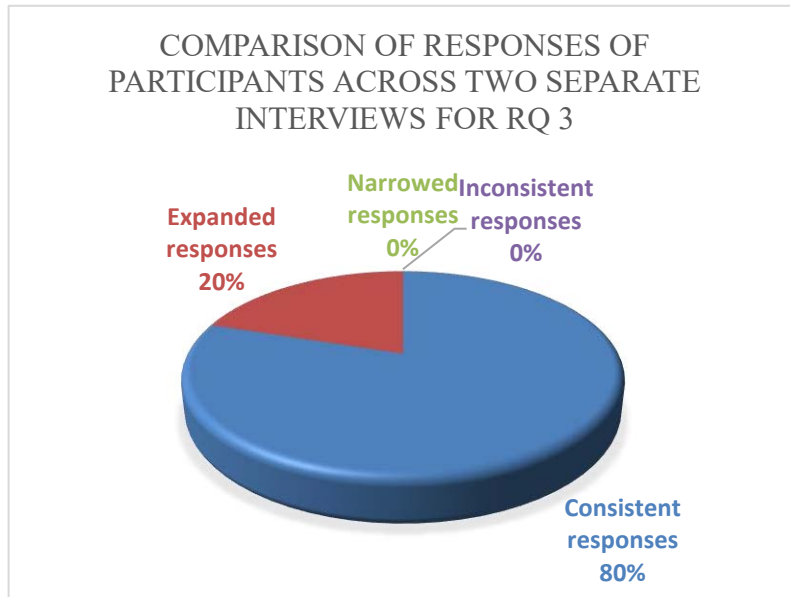


Figure 7. Comparison of responses of participants across two separate interviews for RQ3

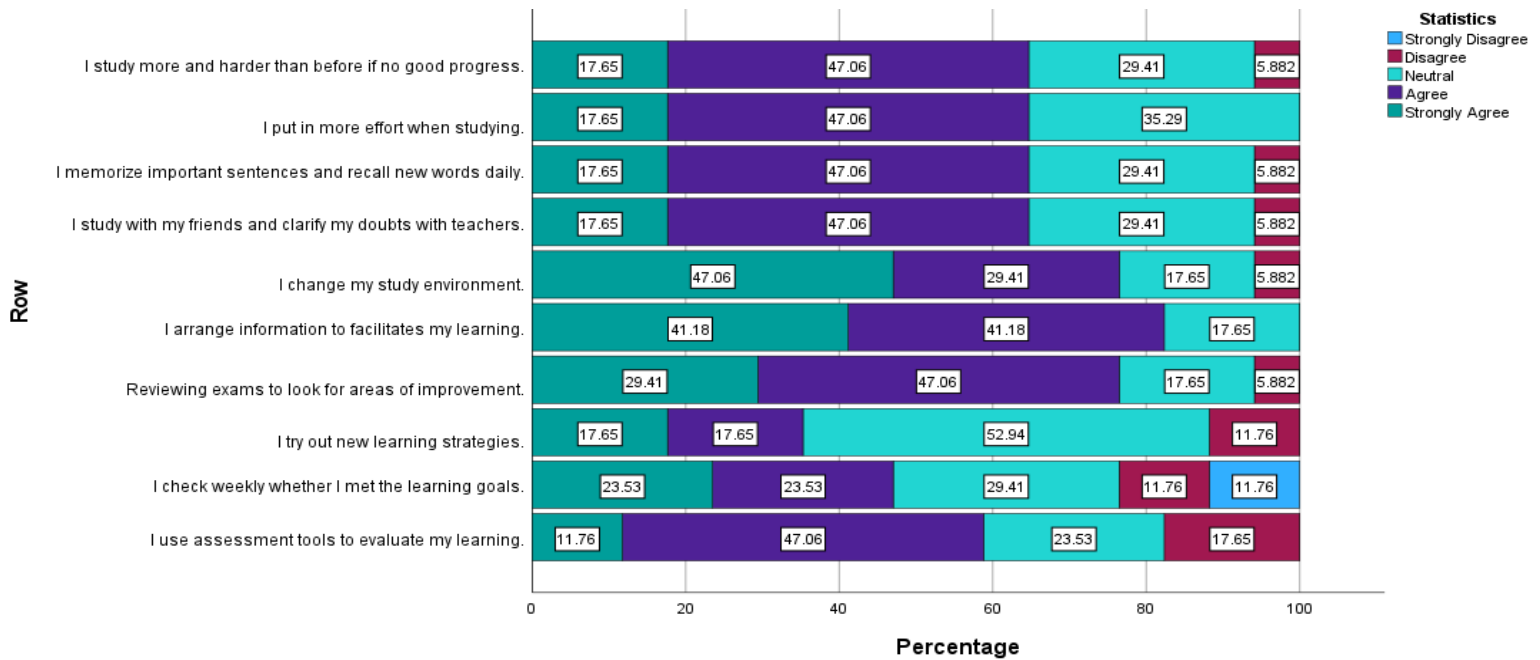


## 5 Results

### 5.1 RQ 1- What reflective learning strategies do language learners have for reflection?

(Table 3) shows analysis of the ratings given to the third question “Which of these following reflective study methods do you do when studying languages? On a scale of 1 to 5, where "never/strongly disagree" to "very often /strongly agree,". (See Appendix 1, question 3) for a more detailed description of the 10 self-regulated learning strategies which were asked from participants.

Table 3. Percentage rates for the Self-regulated learning strategies given by the participants.



According to the statistics of (table 3), the distribution of percentage rates is shown for each rating given by the participants in relation to the 10 self-regulated learning strategies.

In summary, participants reported using the listed SRL strategies very often, often, or sometimes. However, in eight of the strategies, a few participants reported using them rarely, while for one strategy, 11.76% participants reported not using it at all.

The strategy with the highest percentage of either "agreed" or "strongly agreed" responses was "I arrange information/materials into a structure that facilitates my learning," with a percentage of 82.36. In contrast, the strategy with the lowest percentage was "I exchange and question my learning strategies and try out new ones," with only 35.3% of participants agreeing or strongly agreeing with it.

Out of the 10 strategies, 8 received more than 50% of either "agree" or "strongly agree" responses, while only 2 received less than 50%. These two strategies are the previously mentioned lowest strategy, "I exchange and question my learning strategies and try out new ones," and "I check weekly whether I have met the learning goals I have set," which received a response percentage of 47.06%.

The strategy with the highest percentage of "strongly agree" responses is "I change my study environment so that I can learn more effectively without getting bored," with a response

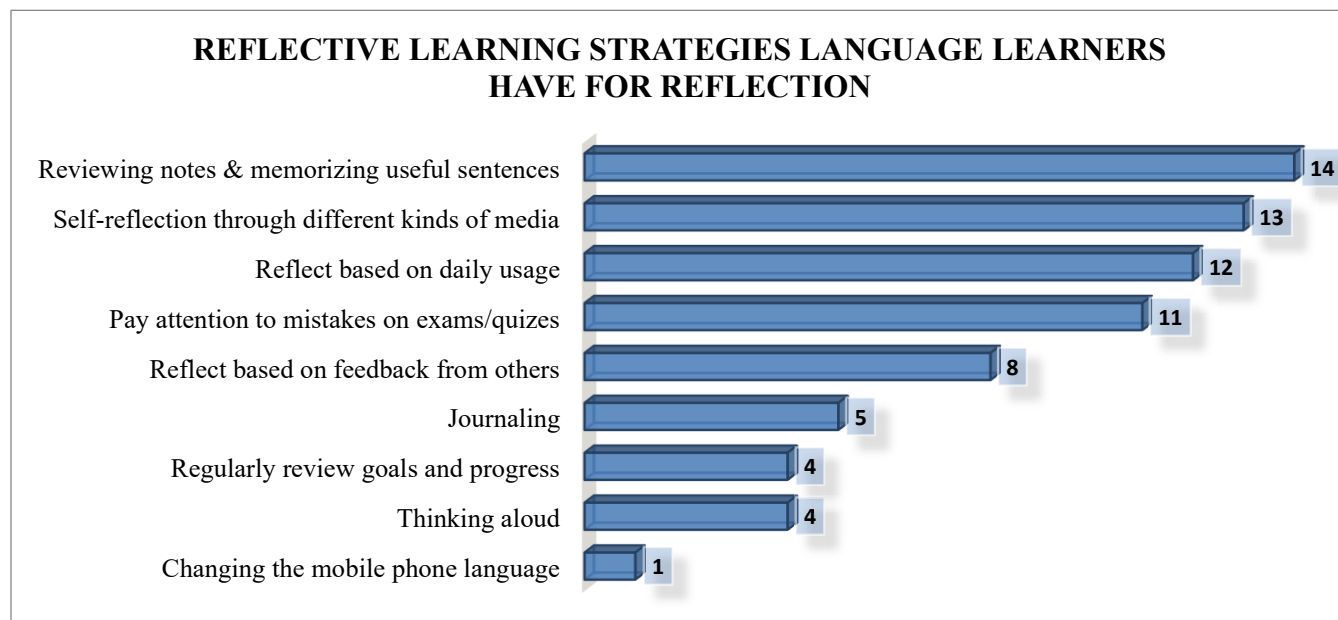


percentage of 47.06%. Only one strategy received a "strongly disagree" response, which was "I check weekly whether I have met the learning goals I have set," with a response percentage of 11.76%. Interestingly, this strategy also had the highest percentage of either "disagree" or "strongly disagree" responses, at 23.5%. Two strategies had neither "disagree" nor "strongly disagree" responses: "I arrange information/materials into a structure that facilitates my learning" and "I put in more effort when studying, whether it's prioritizing it more, giving it more attention, being careful about the learning strategies or how I study it, being more focused and concentrated."

The strategy with the highest percentage of "neutral" responses is "I exchange and question my learning strategies and try out new ones," with a response rate of 52.94%. On the other hand, there are three strategies with the lowest percentage of "neutral" responses, all of which have a rate of 17.65%. These strategies are "Reviewing my exams and graded work to look for areas of improvement," "I arrange information/materials into a structure that facilitates my learning," and "I change my study environment so that I can learn more effectively without getting bored."

The level of SRL strategies used by the students could be determined after carefully analyzing the data received for the third interview question in order to gain a deeper understanding of how they were applying SRL strategies in practice, now with this knowledge at hand, the participants were asked about reflective learning strategies (RLS) that they undertake to enhance their learning experiences. During the interviews a total of nine reflective learning strategies commonly used by students were identified, students frequently mentioned these strategies as being effective in enhancing their learning experiences(*See Table 4*).

Table 4. *Reflective Learning Strategies used by language learners for reflection.*



*Reviewing notes, and memorizing useful sentences* was the most effective method for reflective learning, which was mentioned by 14 participants. The participants mentioned that taking detailed notes during language lessons or while studying and then reviewing those notes regularly helped them to memorize key phrases and vocabulary, which can improve their ability to communicate in the language they are learning.

*“Yeah, sometimes I also try to like to write down what I learned, let's say for vocabularies what I learned, I write all the vocabulary list in aside and I try to write some sentences or regarding that vocabulary so that I can memorize them and measure that I have the basic competence on that or if not then I try to go through those words again and again and I tried to recap those so this helped me actually.”*

*“I will try to memorize some of very useful, native and authentic sentences and then I can change some parts of like verbs or nouns to understand the verbs and nouns differ with different tenses.”*

*“One strategy I use is to review my class notes and textbook after each lesson to reinforce my understanding of new grammar rules and vocabulary words. Because for Chinese you need to know each day's lesson well in order to proceed with the other lessons”*

*“I think you know it like we must like practice writing a lot, so we know how to write the kanji or the Chinese character or something like that. Like do 10 to 20 times like on the piece of paper, that's helpful.”*

*Self-reflection through different kinds of media*, which involves the use of sticky notes, flashcards, YouTube, watching movies, news and TV shows in the target language, Duolingo, was mentioned by 13 participants. The participants mentioned that transforming the study materials into more effective ways of learning like note cards, and flashcards, helps to reinforce their understanding of grammar and vocabulary more. They found this method particularly helpful, allowing them to actively practice and internalize the language through different forms of media. They believed that this approach was a more effective and engaging way to learn a language. Participants further mentioned that using language learning apps such as Duolingo, or online sources such as YouTube or podcasts to practice language skills provides a fun and interactive way to learn new vocabulary and grammar rules which can be considered a form of reflective learning strategy.

*“I use language learning apps and websites, such as Duolingo to practice grammar, vocabulary, and pronunciation on my own time.”*

*“For Finnish, I like to read textbooks and study by myself. Sometimes I also learn from different online platforms. Watching Finnish tv programs and documentaries also helps me to learn new words. I also use Duolingo daily.”*

*“You know a lot of vocabulary in a short amount of time, note cards help with that also I listen to a lot of things, for example, I listen to podcasts, and YouTube language lessons.”*

*“I also try to use the language in my daily life, whether that means listening to Chinese music or podcasts, watching Chinese TV shows or movies, or reading Chinese news articles. In addition to these solo study methods, I find that practicing with others is a great way to improve my speaking and listening skills.”*

*Reflect based on daily usage* was mentioned by 12. Participants mentioned that using the language on a regular basis in real-life situations helps to improve communication skills, vocabulary, and fluency. For instance, some participants mentioned that interacting with native speakers, or even shopping in a foreign language can help to improve language skills. Practicing with peers and natives more often also helps to reduce the fear of making mistakes when using the language.

*“For practice, I think I would tend to talk more because always natural interactions matter most when doing language learning.”*

*“But to practice I always go to gatherings with my international community to keep up with my English-speaking skills.”*

*“I also participate in language exchange programs or find a language partner to practice speaking and listening skills with.”*

*“And then what I do is to seek out opportunities to use the language, so like settings, if I go to the supermarket then I listen keenly to what they're saying in Finnish or in the language that I'm learning, and also ensure that I practice as much as possible.”*

*Pay attention to mistakes on exams/quizzes* was mentioned by 11 participants. According to the participants, taking quizzes and interacting with the material, helped them to get a sense of their understanding and identify areas that need improvement. This process can help learners to better focus their attention and efforts on areas of weakness. The participants also mentioned that using quizzes and other interactive features was a great way to stay motivated to continue improving.

*“Yeah. I think after the test maybe I must look at what I missed. So, what to improve even though I passed the test, there's something that I may not know about the test. I mean can't remember or, I cannot do this question for example, so I kind of like to find the answer for it after the test. So, I think after the test with that, that's the time that I reflect the most. And try to find the correct answers for what I missed.”*

*Reflect based on feedback from others* was mentioned by 8 where the participants' mentioned that it is a highly effective reflective learning strategy that they use to improve their language skills. Participants expressed that seeking feedback from peers, native speakers, or teachers and reflecting on the constructive feedback received was a highly effective way to identify areas for improvement in their language skills. By reflecting on their own performance and taking feedback into consideration, they were able to gain a better understanding of their strengths and weaknesses in speaking. This process not only helped them to address specific areas for improvement but also contributed to their overall language learning success. By actively engaging in reflective learning in this way, they found that their language skills improved more quickly and effectively than through other methods.

*“And also learn new things also because for example like when I don't know how to speak a certain sentence. I have to ask someone and then I will remember it through practicing and when I present it. So I think, I remember it from like learning by doing.”*

*“Yeah, I think that I reflect in a way after like with this feedback. So I like to take the feedback and look into, for example, grammar mistakes, I've made or something that it really makes sense or something like that. So I like to compare the performance I have with the feedback that I received.”*

*Journaling* was mentioned by five participants, and the participants mentioned that reflecting on experiences and thoughts through writing forms like diaries, blogs and portfolios can be a helpful tool for language learning. This can help learners to identify areas where they may need more practice or support, as well as celebrate successes and progress.

*“And so, I have learned to keep a diary or a journal which allows me to maybe list my challenges. At least for language learning then I will list new vocabulary or new grammar that is new to me and how to use it in the real-world setting.”*

*“And but for example, now in the Finnish course, I think there's a way to reflect which I think is quite effective, is like writing the learning diary. Because I usually write it based on the suggested question asking about the content of the lesson that we learned, how do you write for your knowledge about asking people where or when to go for example, and then would that question trigger my thinking about what I have learned, and I think that's good to reflect.”*

*Regularly reviewing goals and progress* was mentioned by four, mentioning that setting clear objectives and regularly checking on progress can be a useful strategy for language learners. By breaking down larger goals into smaller, achievable tasks, participants expressed that they stay motivated and track their progress over time.

*“And so then again, I will set goals for the language learning and ensure that I review regularly the progress towards those goals.”*

*Thinking aloud* was also mentioned by four, where the participants expressed that vocalizing thoughts and ideas in the target language can help them to become more comfortable with speaking and using the language in real-world contexts.

*“I think the one I do the reflection in either writing or thinking aloud like I write what I have learned or sometimes if I like don't feel like writing I can like sing aloud to assess whether what I'm thinking is correct or not, and then that the two ways that I usually do.”*

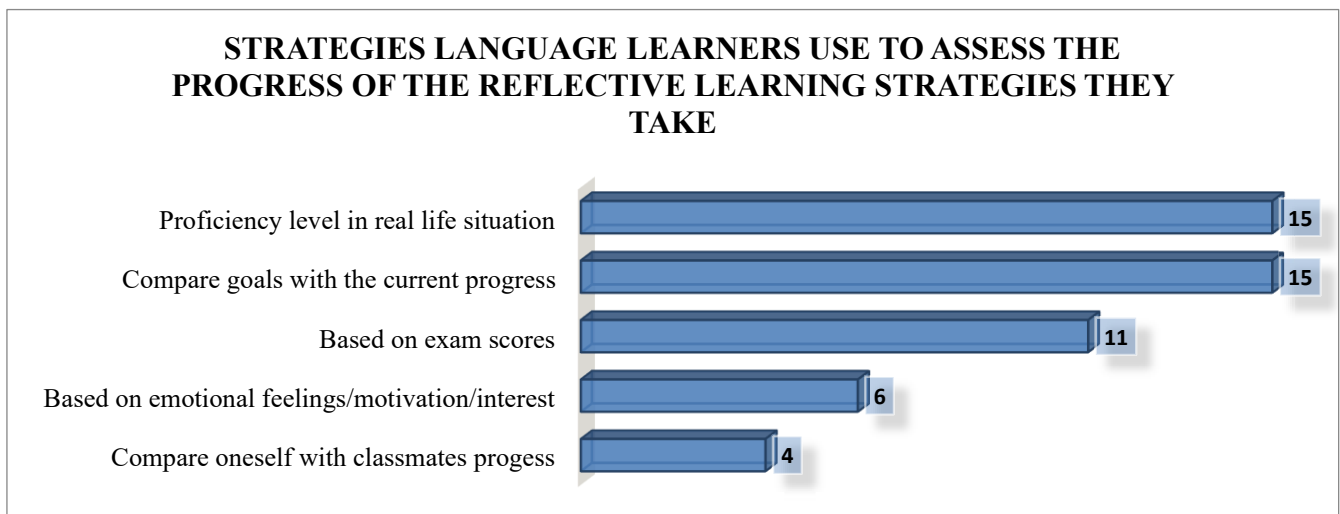
*Changing the mobile phone language* was mentioned by just 1 participant. The participant mentioned that changing the mobile phone language can be a useful way to immerse in the language and practice reading skills, though it may not provide the same level of interactivity and structured learning opportunities as language learning apps and online sources, often seeing the phrases in the target language helps to stay in touch with the language.

*“Sometimes I change my phone's language to the language that I'm learning so that I can see the language much more and then I can practice it better.”*

## 5.2 RQ 2- What strategies do language learners use to assess the progress of the reflective learning strategies they take?

Through the responses, the participants provided it appears that language learners use multiple strategies to assess their progress in the Reflective Learning Strategies (RLS) they take in learning a new language. From the data collected, 5 common strategies used by language learners to assess their progress of the RLS used were identified when generating the codes (see Table 5).

Table 5. *Strategies language learners use to assess the progress of the reflective learning strategies they take.*



“Comparing goals with current progress” was reported by 15 out of 17 participants. The participants expressed that they believe it's important to have a clear understanding of what they want to achieve in LL and regularly check their progress toward those goals. By doing so, they can measure how far they've come and identify areas where they need to improve. They mentioned that it helps them stay focused and motivated to reach their desired level of proficiency in the language.

*“I guess I just look back at the goals I set at the beginning and then I look if I have met those goals and what didn't I meet yet, is it because the initial goal I set was too hard and I look if there are new goals to set for myself and adjust accordingly.”*

*“Whether I reached my achievement with the initial goal I set for myself, if the achievement is higher, then my target is achieved if not that is when I know that I need to work more on my learning strategies.”*

“Proficiency in real-life situations” was also reported by 15 out of 17 students. The participants mentioned that what really helps them to improve their language skills is applying what they’ve learned in real-life situations. It's not just about memorizing vocabulary and grammar rules, but actually using the language in context. When they practice speaking with native speakers, they feel like they are fully immersed in the language and it helps them become more fluent and confident. They expressed that it's like they are not just learning the language, but living it.

*“I guess it is like in the context of language learning it is much more like how much I can understand the language and it's not even how much I can understand also how much I can put into practice like talking. So it's just like if my speaking is advanced, I can understand my methods are working.”*

*“Well, I think it's quite simple. The fact that if I'm able to communicate properly then I know that I have learned what I needed to learn.”*

*“If I start noticing that I'm progressing well like I'm in the country that I studied the language from, so if I can understand more what people are saying or read text better then, I am progressing and it's a form of confirmation for my learning methods.”*

“Exam scores” were reported by 11 out of 17 participants as a means of measuring their progress, and the participants suggested that they place some importance on formal assessment measures. Participants claimed that if the score for the exam is high then the RLS they use is efficient and if not, that means they need to alter the way they learn.

*“Exams are great stimulators for me to see how my learning strategies work let's say that I tried to study for an exam and then I didn't succeed well in the exam as much as I expected and then I will take the exam again by studying with other methods. Then I can see that like if I passed it better I can see that it works.”*

*“I think it reflects on the score I get on the test and also when I see something, for example when I watch TV or listen to songs and I kind of like recognize the word.”*

*“I think it's just through evaluation, so I do a lot of self-assessment tests.”*

“Emotional feelings, motivation, and interest” were reported by 6 out of 17. Participants expressed that they’ve come to realize that their emotional state is important when it comes to assessing their language learning progress. When they are feeling interested and motivated, it's a

good sign that the RLS they've been using is actually working. Some mentioned that it's like a positive feedback loop - the more engaged they are, the more progress they make, and the more progress they make, the more motivated they feel to keep going and learn even more.

*“For example, I might set a goal to memorize 20 new vocabulary words or master a particular grammar rule. Once I've achieved that goal, I can feel confident that I have learned what I set out to learn.”*

*“I guess just seeing if I succeed in an exam, it motivates me to learn more and if I still have my interest.”*

*“For example, if I'm practicing with a friend, I might set specific goals for each session, such as practicing a particular grammar rule or certain topic like weekdays, colors, or numbers, and then evaluate whether I was able to achieve those goals by the end of the session. This way I feel happy with my progress, and I'm satisfied with my way to learn.”*

*“Definitely I see that there's an improvement with the methods I use and that's important it serves as a motivation, encouragement to learn the language more, especially when I start to grasp new words and I start to use them daily.”*

“Comparing oneself with classmates' progress” was reported by only 4 out of 17 students, indicating that learners do not commonly use their peers' progress as a benchmark for evaluating their own progress.

*“And sometimes when I talk or compare with my friends or I go to the classroom and I see my classmates are really doing well and I can't, I don't know those things make me actually feel like well I need to improve those portions and things and it triggers me to do well.”*

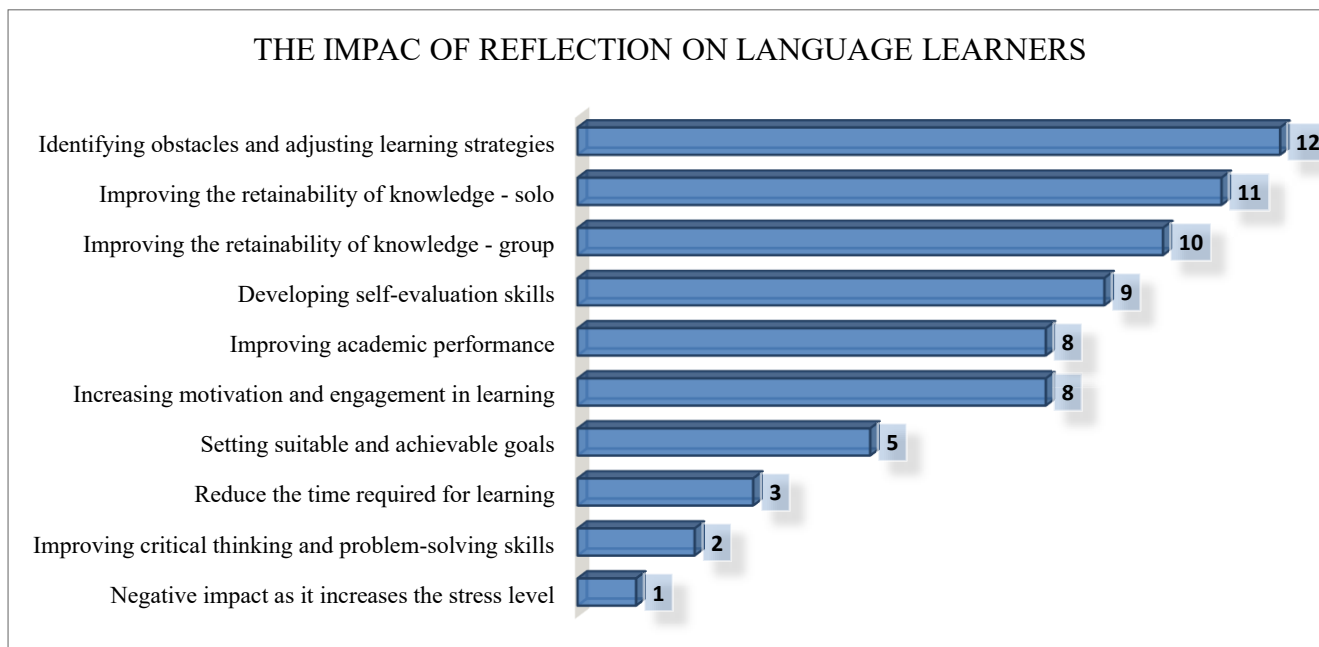
The findings suggest a variety of strategies that language learners use to assess the progress of the RLS they take. The most reported techniques were comparing goals with current progress, assessing proficiency in real-life situations, and exam scores. By looking for RLS language learners use to assess their progress, we can gain insight into how these strategies are helping learners to become more self-aware, motivated, and accountable in their LL journey.

### **5.3 RQ3-How do language learners describe the impact of reflection on their learning?**



This research question aims to explore how language learners perceive the impact of reflection on their learning. By understanding their experiences and perspectives, researchers can gain insights into how reflection can be effectively integrated into LL processes to enhance learning outcomes. From the responses of the 17 participants, 9 common impacts of reflection while learning a language were identified (Table 6).

Table 6. *The impact described by language learners for reflection on learning*



*Identifying obstacles and adjusting learning strategies* were mentioned by 12 participants. The participants mentioned that reflection allows for identifying obstacles that may be hindering their LL progress. They expressed that they struggle to practice their speaking skills due to a lack of opportunities to speak with native speakers. Through reflection, they may explore alternative ways to practice speaking, such as joining a language exchange program or participating in a LL community.

*“Oh yeah, I feel like if I’m not into reflection, I would keep on trying the same study methods all the time. I think not necessarily every language will have a similar learning process and will never be the same. So I feel like it’s a very important step to reorganize and adjust the way that you’re learning.”*

*“For e.g.: sometimes when I get something wrong during an exam, and then when I review my mistakes, I look for what I wrote wrong, this stays in my mind because I know I cannot make this same mistake again.”*

Some mentioned that they find that reflecting on their LL obstacles and seeking out solutions has been helpful in their learning journey. It allowed them to adjust their learning strategies and develop a more effective plan that's tailored to their specific needs and goals. They think this approach is valuable for all language learners because it helps them overcome challenges and make progress toward fluency.

*Improving the retainability of knowledge.* Another common response given by the participants was that reflection helped in improving the retainability of knowledge both individually and in a group vice. The participants described that reflection is a powerful tool for enhancing their ability to retain and recall knowledge. By reflecting on what they have learned, they can reinforce their understanding and solidify the information in their memory.

11 participants agreed that reflection helped to improve the retainability of their knowledge while working individually, participants viewed that by engaging in individual reflection, they can take ownership of their learning and develop a deeper, more meaningful connection to the language.

*“I am kind of a shy person, so I mostly like to do my own work. When the classroom gets chatty, it’s hard for me to concentrate.”*

10 participants said reflection helped to improve the retainability of knowledge while working in groups. Group reflection allows them to discuss their understanding, share insights, and learn from each other’s experiences, by engaging in collaborative reflection, language learners can reinforce their knowledge and deepen their understanding of the language.

*“I think, reflecting with other people may be a good way to retain knowledge longer. Because like we talk much time about one subject by many people. That’s why we have like the message, is repeated many times, I think that’s a good way to remember that subject.”*

While some students agreed that reflecting in an individual and group setting both had an impact on their learning.

*“Just keep doing the continuous reflection. You do it solo like just all alone. Then of course, as a group, you sit down and recall and remember the words. Of course, it’s always very, very easy when it’s done in a group because you reflect you co-regulate collectively, and you can know how far your learning progress is going. So, both as an individual learner and as a group, I tend to look at my progress and understand what I need to do for the next step.”*

*Developing self-evaluation skills* was mentioned by 9 participants. Most of the participants mentioned that they may perceive that reflection positively impacts their learning by helping them develop self-evaluation skills. Through reflection, they identify their strengths and weaknesses, set goals, and make plans to improve their learning. Doing so allows them to take ownership of their learning, and ultimately reduce their reliance on external feedback. This can lead to a sense of empowerment and confidence in their ability to learn.

*“Because when I started to learn the language, my grammar and reading were the worst, but I saw improvement with the strategies I took to build them up. Through reflecting on what I have learned, I have found that the experience has become more productive as I can identify my strengths and weaknesses. This has given me the ability to focus on the areas where I need improvement, which has allowed me to make more efficient progress.”*

*“Yeah, true it helped me a lot because otherwise if I'm not reflecting on what I learned or not then I would be in the dark. I wouldn't know what I learned already and what I needed to learn or improve. So, I think reflection is important. It's a must for a learner more specifically for the language learner because otherwise he couldn't improve, so reflection helped me a lot, really.”*

*Increasing motivation and engagement in learning* were mentioned by 8 participants. Participants mentioned that when they reflect on their experiences, it can help them to connect their learning to their personal interests and goals. When they reflect on what they have learned and how it relates to their interests and goals, they are more likely to feel engaged and motivated to continue learning.

*“I think it's helped me a lot to reflect because as I said before usually, it's more chaotic for me for my learning, especially for languages, because when there's no reflection I tend to forget about my goals maybe not really forget, but also during the course new goals would come up or I adjust them and then I forget or confuse them with my original goals so I tend to lose my motivation more without reflecting so yeah, especially this learning journal helped me a lot to like t*

*o see, obviously in the last few weeks, maybe I lost my motivation and now, ok, I have to focus again and I can do this. Not the negative parts only but also, I can see what I did well already and that motivates me then. So I see that some parts I already managed the others I still have to work on.”*

*“Well, it helped me to be motivated, in my opinion, because like if I put the goal and if I say hey, I will just practice this X amount of words this week and I will be done with them and if I just like to write them down and check it back, turning back and check it again, it helped me to just like improve the language in a positive way. It made me feel much more confident about the language because I felt like I've been learning and seeing the process going. It is also helping me well because if I get the idea that OK, I'm not good at this, I can't study this language especially and I won't be at any time*

*advancing. But if I just like put goals, take notes, and then would be able to memorize or just like know a couple of things. Even weekly advancement is just good for me, it keeps me motivated and more confident.”*

*Improving academic performance* was also mentioned by 8 participants. Participants mentioned that reflection can also improve academic performance by helping to identify areas where they need to improve. Once these areas have been identified, they can develop strategies to address them and do better in the future. They mentioned further that if they struggles with grammar, they can reflect on why this is the case and identify specific areas of grammar to focus on. This can help them to feel more confident in their abilities and perform better academically.

*“So, I think one of the things that it made me do is to improve my motivation, especially where I self-assessed myself and I scored highly. Then it gives me the motivation to keep practicing it and continue learning more also when I realized which learning strategies are effective for me, then I used them to improve my progress with the course so meaning that then I was able to identify areas that I'm struggling that I was able to be intentional and focus my efforts on and practicing the language and also like to keep seeking feedback from my teacher or my peers.”*

*“It was very helpful for me to understand my weaknesses. Reflecting on my own work helps me to know my weaknesses as well as my learnings. For example, I scored less in grammar, therefore, I need to focus my efforts and dedicate more time to practicing grammar exercises, watching instructional videos, or working with my teacher to improve in this area, later in the next exam I had better grades than the previous one.”*

*Setting suitable and achievable goals* was mentioned by 5 participants. One of the benefits of reflection in LL is that it can help learners set suitable and achievable goals. Participants mentioned that by reflecting on their past experiences, they can identify areas for improvement and set specific, measurable, achievable, relevant, and time-bound (SMART) goals that align with their learning needs and objectives. This can help them stay motivated, focused, and on track with their learning.

*“I think reflecting was also an eye opener for me to ensure that I keep practicing and that's like the more I practice, the more I can become better at it.”*

*“Yeah, I think the good thing about having this reflective stage, is just that you can understand. Like where you are kind of, I don't want to say failed, but like, where things didn't go exactly according to your plan. And what were the obstacles to achieving a goal?”*

*“And it makes me think that like oh I tried to study like just by reading my book for example, and that didn't work. I need to for example hear someone speak so I can look it up and see if that method is going to work better for me. So, I think reflecting on learning gives us the opportunity to re-adjust the strategies we had to learn and*

*actually understand what works and what doesn't work, what is going well what needs to be changed and also, for example, if my goals were too unrealistic, I think reflecting also helps you to like to understand how to set suitable and like achievable goals.”*

*Improving critical thinking and problem-solving skills* was mentioned by 2 participants. Participants expressed that reflection allows learners to think deeply about their experiences, which can lead to a better understanding of the language and the ability to solve problems more effectively.

*“I think it boils down to the question of practice, like when you reflect a lot and when you assess it gives you a platform to keep reviewing what you have learned and so it boosts your memory and ensures that like the last thing on your mind is always what you've been thinking about. So, the more you reflect and the more you assess yourself, and the more you test yourself, the more you become better at it and the more your memory improves and when you practice on it then it becomes who you are and what you are. So, I think it has helped me in my memory and especially with language rules. And also, it has helped me retain as much vocabulary as possible and also help me with fluency on the basic level of speaking Finnish.”*

*“For example, when I am in class or studying alone, I take notes and reflect on what I have learned after each session. I ask myself questions about what I learned and how it connects to other concepts I have already learned. I also try to connect what I have learned to real-life situations, which helps me to remember them better. When I am practicing with others, I make it a point to reflect on what I have learned after each session as well also try to connect what I have learned to the experiences of my practice partners, which helps me to remember it better and see the language in a more real-world context.”*

Participants further expressed that when they reflect on their language learning experiences, they may ask themselves questions like "What worked well for me?" or "What could I have done better?" This type of self-reflection helps identify areas where they need to improve their critical thinking and problem-solving skills.

*Reducing the time required for learning* was mentioned by 3 participants. Participants suggested that regular reviews are effective strategies to keep the learning process stable and ensure long-term retention of information. On the other hand, participants mentioned when they reflect on what they have learned, they engage in a deeper level of thinking, allowing them to consolidate their understanding of the material. This helps them to remember the information better and recall it more easily when they need it.

*“Yeah, I think that's very useful. That's very practical because I saved time.”*

*“So, I think maybe I can have a comparison before the study and now. In the past, I usually like studying without reflection. Just finish one lesson and then move to another lesson, and then when it comes to the exam, for example, I usually like to learn again and practice again all the lessons that I learned in one or two days. But I figure out that during the learning now because we always seem to always have reflection after lessons, so I say when it comes to the exam it takes me less time of revision.”*

Some further mentioned that they make reflecting and reviewing a regular part of their study routine, this creates a strong foundation of knowledge that they can build upon over time. This means that they don't have to spend hours studying the day before an exam, because they have already invested time in learning the material. Instead, they can use the time leading up to the exam to review key concepts and practice applying them in different contexts.

*Negative impact as it increases the stress level* was mentioned by 1 participant. One student expressed that reflection has a negative impact on his learning as it increases stress levels. Reflection can bring to the surface emotions related to one's performance, such as anxiety or disappointment, which can be difficult to manage. In addition, the process of self-evaluation can be challenging and require students to confront areas where they may be struggling or underperforming. This can lead to a sense of overwhelm or inadequacy, which can further increase stress levels.

*“I guess a little bit, but it also sometimes makes me feel overwhelmed sometimes, because then reflecting on that I actually know what I know, and then I figured out that I don't and then it kind of makes me anxious or overwhelmed. So, it did help me but like I guess not fully.”*

Out of the 9 impacts that were emerged during the analysis, the identifying obstacles and adjusting learning strategies was the one mentioned most, and the second most common strategy was improving the retainability of knowledge.

## **6 Discussion**

As a Chinese language learner during my bachelor's studies, I had the opportunity to experience the challenges of learning a new language. During my master's studies, I dived into the theory of SRL and reflection and came to understand the importance of reflective learning strategies in language acquisition which I wished I knew before. To explore this topic further, I conducted a qualitative analysis to investigate the different types of RLS used by language learners

and to determine whether these strategies positively impacted their daily language learning. This chapter provides an overview of each research question, the findings and how it relates to previous studies.

## **6.1 Reflective Learning Strategies language learners take to reflect on their learning.**

The first research question in this study was "What reflective learning strategies do language learners have for reflection?" According to the standard responses, this study identified nine RLS for language learners to reflect on their learning. Out of the nine, the three most common RLS mentioned frequently were reviewing notes and memorizing useful sentences as the most effective strategy, followed by self-reflection through different kinds of media, and reflection based on daily usage as another common strategy. Furthermore, another significant finding of this study was the ratings the participants gave to the ten self-regulated learning strategies that were asked of the participants based on (Sebesta & Bray Speth, 2017; Zimmerman & Martinez-Pons, 1986). More than 65% of all the SRL strategies had ratings of very often, often, and sometimes in terms of their use. This finding aligns with previous research by Sebesta & Bray Speth (2017), highlighting the importance of SRL strategy use.

The most common finding mentioned by 14 out of 17 participants, was *reviewing notes and memorizing proper sentences*, which aligns with previous research by Salame & Thompson (2020), who mentions a good way for students to take strategic notes, link background knowledge, summarize different incoming ideas, know the vocabulary, know the main points presented in the lecture, and understand the vocabulary that is being used to record notes. Further, as mentioned in the previous research (Meichenbaum, 1977), the learners can use checklists to guide them with self-instructions. They can remind themselves to memorize essential topics for an upcoming exam and to know what is already known and what needs to be focused. This can lead to academic success for students and impact their overall performance, which also relates to the casual attribution of SRL.

*Self-reflection through different kinds of media* was another common finding to the first research question mentioned by 13 participants, which is in line with the previous research (Komachali & Khodareza, 2012), which showed that the use of vocabulary flash cards in teaching vocabulary to students resulted in more remarkable vocabulary improvement. This can also be an

attention-focusing technique in SRL. One significant advantage of flashcards is that they can be taken almost anywhere and studied whenever one has free time. Many participants mentioned that listening to podcasts, songs, youtube videos, language learning apps, Duolingo, and online quizzes in the target language helped them practice their learning daily. Naseri and Motallebzadeh (2016) found that podcasts can be used as an educational technology to foster the self-regulation ability of language learners. Another study by (Chiao-Man Tsai, 2016) revealed that learners promoted learner autonomy by using Duolingo in their leisure time and daily learning goals, seeking more information to solve their problems, selecting related materials, and evaluating their performance and achievement is also in line with this current research.

The third common finding was *reflect based on daily usage* which was mentioned by 12 participants. This finding is in line with previous research by Chakowa (2019), who discovered that engaging with peers and native speakers can be an effective way to improve language skills. This finding highlights the importance of language learners' reflection strategies, particularly daily usage, in enhancing their language skills. Language learners who engage in daily reflection on their language usage and interact with peers or native speakers can effectively improve their language skills, as supported by previous research by Chakowa and the current study's findings. By reflecting on their use of language in real-world situations, learners can identify areas for improvement and work to address those weaknesses. It is essential for language instructors to encourage learners to reflect on their language usage, promote opportunities for communication with peers and native speakers, and provide guidance and support for effective reflection strategies.

Another interesting finding to answer research question one was *reflect based on feedback*. Previous research by Schön (2017) found that reflecting on experiences is essential to professional development and can lead to improved performance which is in line with the current study where participants mentioned that feedback helped them to identify areas for improvement and work on developing those areas by actively seeking feedback from peers, native speakers, or teachers and reflecting on the constructive feedback received. The study (Butler & Winne, 1995) claims that feedback is inherent in and a prime determinant of SRL processes. It is in line with the current research by (Hattie & Timperley, 2007), which highlights that feedback is not only an essential pedagogical approach that serves as a follow-up to assessment, but it is also one of the most influential factors influencing students' achievement.



*Paying attention to mistakes on exams/quizzes* was another interesting finding in research question one. It encourages learners to review and analyze their mistakes, leading to a deeper understanding of the language and improving their language proficiency. This also helps the learner to self-monitor their progress (Zimmerman, 2002).

*Journaling* which is potential finding to this research question, provides students with reflexive benefits by allowing them to learn more about their own LLS (Cajski, 1999). This current study is in line with the research by (Zhang et al., 2022), which, according to the qualitative findings, identified that journaling increased students' awareness and increased their usage of self-regulated writing practices. Previous research by Morrison (1996) mentions that an advantage of journals is that learners tend to write about what is important or exciting to them; attitudes and beliefs about learning have been shown to influence learning. Journals can be easily integrated into a course to promote language learning objectives and serve as a self-evaluation strategy in SRL.

Furthermore, another potential finding to research question one, *reviewing goals and progress regularly*, is consistent with previous research in SRL theory. It emphasizes the significance of goal-setting and progress monitoring in SRL (Panadero & Alonso-Tapia, 2014). By incorporating this strategy into their learning routine, language learners can improve their self-awareness and make more efficient progress toward their language learning goals.

*Think-aloud* was the least common finding to answer research question one that can be considered a self-regulatory imagery process. By doing so, learners can identify cognitive and metacognitive processes in which they are asked to speak aloud while thinking, solving problems, or learning (Hu & Gao, 2017). This can assist students in clarifying their thinking, identifying areas of difficulty, and developing new ideas and solutions (Zimmerman & Kitsantas, 2005). However, training and prompting must be carefully designed and implemented to improve the methodological rigor of using think-aloud protocols in research.

Lastly, another unexpected finding to answer research question one was *changing the mobile phone language* mentioned by just one participant. While this RLS may appear to be an insignificant reflective learning approach, it can act as a constant reminder of the language being taught. It can assist learners in becoming more engaged in the language. This is especially useful for learners who do not have access to a language-learning environment or need the opportunity to practice the language regularly. When learners see their phones in a new language, they may

feel a feeling of accomplishment and progress, which may inspire them to continue their language-learning journey.

However, while my research does not directly contradict previous studies on RLS for language learners, it does provide a fresh perspective and a deeper understanding of the approach's potential benefits and limitations. For example, limitations include individual differences because every student has their way of learning, preferences, and background. As a result, something other than what works for one student may work for another. Some reflective learning strategies require access to specific resources, such as language learning apps or online sources. Students who need access to these resources may find it challenging to implement these strategies. Some reflective learning practices may be inappropriate for the learner's cultural background or must be culturally suitable. Journaling, for example, may not be a widespread practice in some cultures, and learners from such cultures may find it challenging to engage in this reflective method. Therefore, we can continue to develop more effective and personalized strategies for language learners that consider their individual needs and preferences for learning by building on previous research and exploring new avenues of investigation.

## **6.2 Strategies language learners use to assess the progress of their reflective learning strategies they take.**

The second research question in this study was, "What strategies do language learners use to assess the progress of the reflective learning strategies they take?". Five common strategies to assess the RLS language learners' progress were identified as answers to the second research question based on thematic inductive analysis followed by the study (Foong et al., 2021). The three most common findings to this research question were proficiency level in real-life situations, followed by comparing goals with the current progress and based on exam scores.

The most common strategy to assess the progress of the RLS was *proficiency in real-life situations* mentioned by 15 out of 17 participants. According to previous research (Syaepul Uyun, 2022), speaking is commonly the skill learners are assessed when the first impression is formed. As a result, speaking abilities are required to communicate with others. This approach can provide a more authentic and accurate evaluation of a self-regulated learner's language proficiency as it assesses their ability to apply what they have learned in real-world contexts. By observing how

students use their language skills in real-life situations, it is possible to determine whether they have effectively applied reflective learning strategies and developed the necessary language skills to communicate effectively.

*Comparing goals with current progress* was another common finding which was also mentioned by 15 participants. By comparing goals with their ongoing progress, learners can self-evaluate their progress and make appropriate adjustments to attain their goals, as highlighted by Zimmerman in the SRL theory. This is also in line with the SRL component of self-monitoring, where Zimmerman (2002) highlights that students can monitor themselves by comparing their current progress with the initial goals they have set. For example, once the goals and current proficiency levels are established, the next step is to compare the two. Comparing goals can be done by creating a chart or spreadsheet that lists the goals and the current level of proficiency for each skill area, such as speaking, listening, reading, and writing.

Previous research (Özkan & Tuncer, 2021) mentions the practical recommendations on reflective learning tools such as diaries, portfolios/e-portfolios, and blogs as resources for learners in language education as they help learners track their progress and provide a concrete record of their language learning journey. These tools also enable instructors to monitor their student's progress more comprehensively, tailor their teaching methods accordingly, and allow learners to self-record their progress in multiple skill areas, providing an authentic and comprehensive picture of their overall language proficiency.

Another common finding mentioned by 11 participants was using *exam scores* to evaluate the effectiveness of the RLS. Analyzing high and low grades in exams can provide valuable insights into the effectiveness of RLS and help learners develop more effective approaches to learning. This is supported by a study conducted by Karande & Kulkarni (2005), which found that poor school performance leads to low self-esteem in children and causes significant stress for parents. Concerning what the students mentioned, if they achieve high grades during an exam, it shows they have been utilizing effective self-regulated learning strategies, such as setting clear goals, monitoring their progress, and adjusting their learning strategies when necessary. This further leads to the SRL component, casual attribution, which describes the thought that led to one's mistakes or achievements (Zimmerman, 2002).

Another potential finding of research question two was *emotional feelings, motivation, and interest* that emerge during the learning process as a strategy for observing the effect of reflecting

on their learning strategies. This is consistent with the findings of Méndez-López and Aguilar (2013), who investigated the effects of Mexican language learners' emotional experiences on their motivation to learn English. The findings suggest that self-reactions such as emotions, both positive and negative, play a role in increasing and decreasing motivation. Although negative emotions may be considered detrimental to foreign language learning, the study's findings by Méndez-López and Aguilar (2013) claim that negative emotions can help as a learning enhancer.

*Comparing oneself with classmates' progress* was the least common finding to answer research question two. This finding also relates to the social comparison theory proposed by the famous psychologist Leon Festinger in 1954, who believed that we use this comparison process to establish a standard against which we can accurately assess ourselves (Cherry, 2019). The participants described this technique as a way to compare their language abilities to their classmates. If they discover that their skills fall short compared to others, they may be motivated to work harder to catch up. However, we must consider that comparison can also lead to unnecessary anxiety because of constant comparison.

### **6.3 Language learners' description of the impact of reflection on their learning**

The third research question of this study was, "How do language learners describe the impact of reflection on their learning?". Nine impacts were found using the common themes that emerged during thematic inductive analysis. Out of the nine, the three most common impacts were identifying obstacles and adjusting learning strategies, improving the retainability of knowledge, and developing self-evaluation skills. The results of the present study align with earlier research on the benefits of reflection in language learning in terms of SRL. Several studies have shown that reflection can promote learners' self-awareness, improve their learning strategies, and enhance their overall language learning outcomes ((Kohonen, 2001; Maher, 2017; Morrison, 1996; Truong, 2021).

Previous research has found that reflection helps learners identify the strategies that have been effective in their language-learning process (David & Kochappan, 2006). A significant benefit of reflection identified in the present study which was mentioned by 12 participants is that it helps learners *identify obstacles and adjust their learning strategies, which also aligns* with the SRL component of self-monitoring. For example, if a student aims to learn ten new vocabularies

per week but only learns five, they might revise their objective to represent their existing ability better. This is consistent with previous research (Chang, 2019), which explored the impact of reflection on learning through interviews and generalized themes regarding how reflection impacts learning. Specific goals can serve as benchmarks for measuring personal progress. People evaluate their performance positively when they achieve specific goals. As highlighted by previous research by Panadero & Alonso-Tapia, (2014); Zimmerman (2000), when goals are too complicated, people cannot achieve them and negatively evaluate their performance, which can lead to a loss of self-efficacy.

Second common finding mentioned by 11 participants to the research question three is *improving the retainability of knowledge individually and in a group*. This finding is consistent with previous research demonstrating the value of reflection on learning outcomes. Schön (2017), for example, argued that reflective practice is essential for professionals to improve their performance continuously. The study also emphasizes the role of both individual and group reflection in improving learners' knowledge retention. While some previous research has primarily focused on the advantages of individual or self-reflection, this study suggests that collaborative reflection can also be an effective tool for improving learning outcomes. This finding is consistent with (Chang, 2019), who mentions that reflection is not just an individual activity but can also be a collective activity.

The next common finding mentioned by 10 participants for research question three was the *development of self-evaluation skills*. The findings from the above research suggest that reflection has a positive impact on language learners' self-evaluation skills. This aligns with earlier research that identified reflection as a critical element of self-regulated learning (Maher, 2017; Upton & Hirano, 1983). As Zimmerman (2002) suggested, evaluating one's learning progress, setting goals, and planning improvement strategies are critical for developing SRL skills, which are associated with higher academic achievement and improved learning outcomes.

Another finding is *setting reasonable and achievable goals*. Reflection can also help learners adjust their goals based on their progress and changing circumstances. For example, as highlighted by Zimmerman (2000), if a learner realizes that a goal is too ambitious, they can modify it to make it more realistic and achievable which is also an adaptive decision regarding SRL. These are adaptive decisions that learners can take regarding SRL in facilitating their learning.

Another finding is *improving critical thinking and problem-solving skills*, consistent with (Altay & Saracaloğlu, 2017), which sought to investigate the relationship between language learning strategies, critical thinking skills, and self-regulation skills in preparing class students. As the participants mentioned, reflective learning impacted their learning by improving critical and problem-solving skills, making them more autonomous learners where he/she can control their learning and critically reflect, make decisions, and take action for their learning development. By reflecting on their learning experiences, learners can analyze and evaluate their thinking processes, identify gaps in their understanding, and develop strategies to overcome obstacles or challenges. This can help learners become more independent and self-directed in their learning as they learn to identify and solve problems independently, leading to self-satisfaction in SRL.

*Increased motivation and engagement in learning* was also another finding to answer research question three. Though this study found that reflective learning positively impacted motivation and engagement in learning, participants mentioned that they take ownership and control of their learning and can motivate themselves throughout the learning process, which is one of the definitions of SRL. However, previous research by Liu (2015) suggested that some autonomous learners felt unmotivated to complete tasks outside the classroom, highlighting the importance of fostering motivation for language learning. To incorporate reflective learning, teachers should employ techniques that help foster motivation, such as implementing extrinsic motivational factors, such as assigning a grade to reflective learning tasks, which may need to be implemented, and raising awareness of intrinsic factors. In addition, reflection can also help learners to appreciate the progress they have made. By looking back on their learning experiences, learners can see how far they have come, which can boost their confidence and motivation to continue learning while leading to self-satisfaction.

This current research also found *improving academic performance* as another finding for the research question three. This finding aligns with (Zimmerman, 1990), who highlights SRL's importance on academic performance. Another finding for this research question is that regular reviewing and reflection can also *reduce the time required for learning* which is consistent with the time management technique mentioned by (Cirillo & Info 2006). Time management as a component of self-control is essential because learners can avoid cramming for exams and rushing to complete assignments by investing time in learning and reviewing the material regularly, which

can lead to stress and burnout. This finding is especially pertinent in today's educational system, where students are frequently under pressure to learn quickly and efficiently.

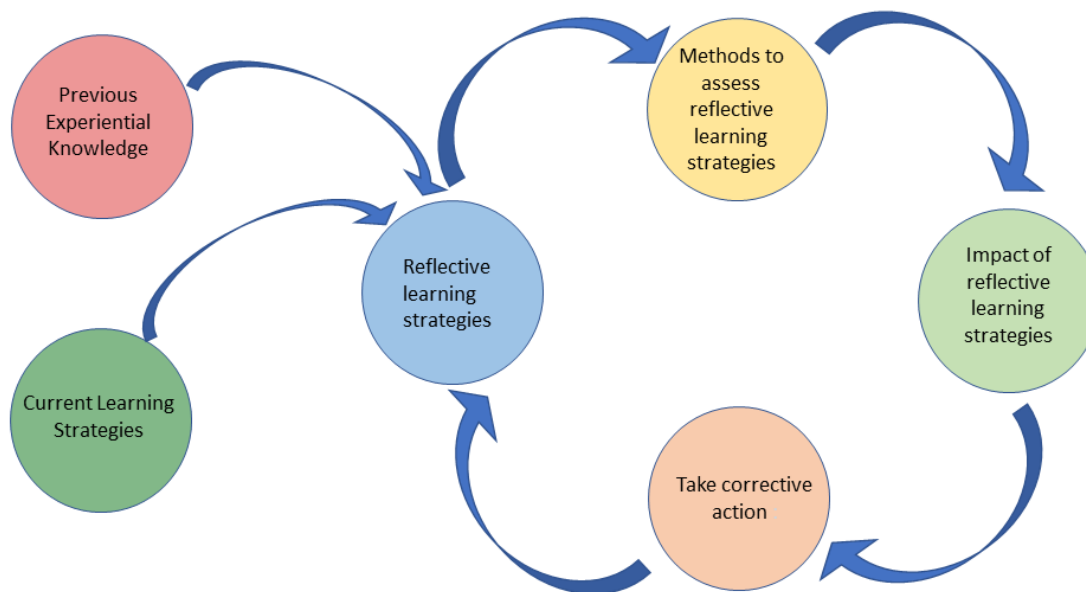
Lastly, another finding derived from one response is the *negative impact as it increases stress levels*. However, the present study adds to previous research by highlighting the specific emotions language learners may experience during reflection, such as anxiety and overwhelm (Shao et al., 2020). This finding suggests that educators need to be aware of the potential negative impact of reflection and provide students with the necessary support and guidance to manage their emotions effectively while highlighting the limitations of reflection, as it does not always result in a complete understanding of one's knowledge and can sometimes lead to a sense of inadequacy.

Therefore both language learners and teachers must consider practice when developing teaching activities and learning strategies. Learners need to practice regularly and apply what they have learned in real-world situations; they are more likely to remember the information over the long term. This is because practice helps consolidate memories, making recalling information when needed easier.

#### **6.4 Self-Reflection and language learning described in a model**

Based on the knowledge I have gained while building the theoretical framework of this study and from previous research (Chang, 2019; Soberg, n.d.; Upton & Hirano, 1983) on reflection and from the analysis of the three research questions in this current research, I created a structured model (*See Figure 5*) that can be used for reflection in LL based on the data collected and the results of the analysis, as well as the information gathered from the theoretical framework. This model can be used by students to reflect on their language learning progress, identify areas for improvement, and set goals for future learning. Learners can gain a better understanding of their language learning process, become more aware of their strengths and weaknesses, and take proactive steps to improve their language skills by using this structured model. Furthermore, the model can be tailored to meet the specific needs and goals of individual students, making it a versatile and adaptable tool for language learning reflection.

Figure 5  
*Self-reflection in Language Learning Model*



**Previous experiential knowledge** - Consider your previous methods with any other language you learned before. Consider your level of proficiency, how you learned the language previously, and any difficulties you encountered. This will provide you with a foundation upon which to build.

**Current learning strategies** - Take a look at the methods you're currently employing to learn the language. Are you enrolled in a class, utilizing language-learning apps, or working with a tutor? Assess the efficacy of these strategies and whether they correspond to your way of learning.

**Choosing reflective learning strategies** - It is critical to have methods for reflecting on your learning experiences and strategies. Therefore in this stage, you look for ways you can access the quality of your learning strategies. Here are some methods for reflecting on your learning strategies, journaling, self-assessments, mind-mapping, reflection prompts, etc.

**Methods to assess reflective learning strategies** - During this phase, you need to assess the efficacy of reflective learning strategies, it is important to identify suitable methods to evaluate the impact of these strategies on your language learning progress. Evaluate your progress toward your learning objectives by assessing the efficacy of reflective learning strategies: Have you made any significant strides? If so, which reflective learning strategies were most helpful in achieving this progress? If not, which strategies might need to be tweaked or changed? Seek feedback on the effectiveness of your reflective learning strategies from others, such as language teachers, tutors,



or peers. This can provide useful insights into areas for improvement and aid in the refinement of your approach.

**Identifying the impact of learning strategies** - With the evaluation received from the two phases above you can now identify your language strengths and weaknesses. This can be accomplished by analyzing the performance in various language tasks and identifying areas in which you excel as well as areas in which you need to improve.

**Take corrective action** - This section entails developing a language learning action plan different from the goals set initially in the forethought phase which includes specific steps you can take to improve in areas and set a timeline for achieving them where you identified in which you need to grow, as well as developing a roadmap for achieving your language learning objectives. Be honest with yourself about where you need to improve. Grammar, speaking, listening, and writing skills may be included. Identifying these areas can assist you in concentrating your efforts on specific language learning objectives. Remember that learning a language is a journey that requires time, patience, and consistent effort to see results.

*Note: After the last stage “Take corrective action”, then it goes back to “choosing reflective learning strategies” Since learning is a process, the strategies you take might vary from time to time, which is why this process keeps continuing as a cycle.*

## 6.5 Conclusion

This study emphasized the significance of reflection in language learning within the self-regulated learning (SRL) theory framework, employing Zimmerman's cyclical SRL model as the main theoretical foundation. More specifically, the study centers on the reflection phase of Zimmerman's model rather than the forethought and performance phases because language learning requires a lot of individual learning and constant practice; therefore reflection phase benefits this learning. Adopting a qualitative approach, this study employed an inductive thematic analysis to generate common codes from the responses of 17 language learners who participated in the study. It proved that reflective practices positively impact learners' motivation, comprehension, and performance. Therefore, it is clear that students who actively engage in reflective learning have a greater chance of achieving success in their language learning activities. Thus, educators and policymakers should focus on teaching effective reflective learning strategies

in curriculums to support autonomous language learning skills among learners. Furthermore, institutions may consider providing training to teachers about applying practical approaches motivated by current research on reflective interventions for improving communicative competence alongside direct feedback practices and interactional opportunities with peers or native speakers as an essential supplement for more effective language education policies worldwide.

The study explicitly investigates the reflective learning strategies language learners employ to enhance their language learning process; the main findings for RLS included reviewing notes and memorizing useful sentences, regularly monitoring goals and progress, and attending to mistakes. Furthermore, this study emphasized the strategies language learners use to assess the effectiveness of their reflective learning strategies; the main findings for these strategies include comparing oneself with classmates' progress, proficiency in real-life situations, and comparing goals with the current progress. Finally, this study also emphasized the impacts of reflection on the learning outcomes of language learners; the main findings for impacts include identifying obstacles and adjusting the learning strategies accordingly, improving the retainability of knowledge, improving self-evaluation skills, and increasing motivation. In conclusion, this study's findings highlight the importance of reflection in language acquisition and its potential to support more effective and efficient SRL.

## **6.6 Limitations**

Like any other scientific research study, this study too has its limitations. One of the main limitations was the selection bias and lack of generalizability. The students I selected for my study were not representatives of the same language course or the same language, most of the students were Finnish language learners who have completed the Survival Finnish and Beginner Finnish courses of the University, and there were fewer participants who participated as other language learners. This limits the generalizability of my findings to other language learners who may be taking different languages or learning in different contexts. Another limitation was the limited scope. As I only conducted interviews, my research may not be able to capture the full breadth of reflective learning strategies for language learners.

## **6.7 Future recommendations**

Since the data in this current study was from language learners at various levels of proficiency, future studies can consider analyzing the data by proficiency level. This could provide insights into how learners at various levels evaluate their language learning achievement and what factors contribute to their success. In addition, future studies can investigate the impact of motivation since motivation is an important aspect of the success of language learning. Future studies can consider investigating the effect of motivation on how language learners evaluate their progress. For example, do learners who are very motivated to acquire a language have a different perspective on their achievement than those who are less motivated? Further considering the importance of culture is recommended for future study purposes. Culture can influence how learners approach language acquisition and how they evaluate their progress, therefore consider investigating the impact of culture on how learners evaluate their accomplishments, particularly with participants from various cultural backgrounds.

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## 8 Appendices

### Appendix A

*This questionnaire deals with the study habits of language learning. This study is conducted to see how the Reflection phase can be beneficial to the success of learning a language more efficiently. Please share your honest thoughts and opinions. The findings of this survey may be included in a master's thesis research or a presentation for educational reasons, but only the anonymous responses are included. Unless you give me permission, I will not utilize your actual responses for any kind of research.*

1. Tell me about how you see yourself as a learner and also a language learner?
2. As a language learner, what kind of reflective study methods do you practice to keep up with language learning in the classroom, alone or with others?
3. Which of these following reflective study methods do you do when studying languages? In a scale of 1 to 5, where "no use/1/strongly disagree" to "most of the time/5/strongly agree,"

	1	2	3	4	5	
I use checklists, new-vocabulary logs, learning journals as assessment tools to help me evaluate my learning.						Self-assessment
I check weekly whether I have met the learning goals I have set.						Reviewing set goals
I exchange and question my learning strategies and try out new ones.						Rationalizing
Reviewing my exams and graded work to look for areas of improvement.						Reviewing exams or graded work to look for improvements
I arrange information/materials into a structure that facilitates my learning ( learning journals, note cards, study aids, etc.), summarize, highlight, writing important sentences)						Transforming study materials into more effective ways
I change my study environment so that I can learn more effectively without getting bored, for example go to a café, library or change the setting of my study table.)						environmental organizing
I study with my friends and clarify my doubts together with their assistance, I ask my teachers if I am not clear about any specific grammar or any topic related to the language during the class or even after the class through email.						seeking assistance from friends and teachers
I memorize important and useful sentences and recall new words daily so that I know their meanings.						Recalling and memorizing
I put in more effort when studying, whether it's prioritizing it more, giving it more attention, being careful about the learning strategies or how I study it, being more focused and concentrated.						Better aimed effort
I tend to study more and harder than before if I figure out I have no good progress						More generic effort

4. When you use these reflective study Methods, what happens? How do you know it helped you to achieve your learning goals?
5. How do you know you have learned what you need to learn?
6. What do you do in practice when you reflect your learning? How do you proceed?

**Please let me know how you think your reflective study help to improve your learning of the language**

7. How do you think reflecting on your learning helped you improve over the time you have been learning the language?
8. How do you think reflecting on your learning has helped you remember what you have learned in the classroom, alone or with others?
9. While reflecting, have you come across any areas that revealed you needed improvement in study methods? What changes have you made to improve your studying?
10. Do you feel reflecting has helped you to reach your goals for learning?
11. Do you have anything you want to add?

*Do you mind if I use some parts of this interview in my research paper or presentation as an anonymized example?*