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Navigating Toward an Uncertain Future:

How Students Regulated Goals During the Emergency Remote Learning

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This study aims to examine the goal-setting regulation of higher students in the context of emergency remote learning. Using Emergency Remote Learning (ERL), Self-Regulated Learning (SRL) and Achievement Goal Theory (AGT) as main theoretical frameworks, this study sought to examine which type of goals students set during the pandemic, how the emergency remote learning influenced students’ goal setting and regulating, which challenges students confronted and strategies to successfully overcome them.

The thesis targets international higher students who started their studies in 2020, using qualitative method and designed individual in-depth interviews with to gain insights about students of 2020’s goals. Besides, a small set of quantitative data is also collected and analyzed to investigate the situated awareness of students about emergency remote learning.

The findings reveal several notable points. First, studying under the circumstance of emergency remote learning is not only in an emergency manner but also has a persistency characteristic, thus long time of online teaching might cause relatively high extent of stress in students. Second, students in first year (during the emergency remote learning) tended to pay more attention to their mastery ambitions. After the emergency remote learning, there was a tendency to shift goals to performance-orientation. Third, not all goals changes were related to the influence of emergency remote learning, since goal change is a natural phenomenon in life. Forth, among challenges confronted during the emergency remote learning, instructional challenges and emotional and motivational challenges are most repeated and notable. Fifth, students shared numerous useful tips and strategies to overcome the hard situation, notably, some of them are avoidance-oriented.

The implications of this study include the potential for instructors to design their teaching to better facilitate students in emergency remote learning, especially to compensate for the shortcomings of support system and ill-designed instructions. Besides, insights from the finding also contribute to furthering research on consequences of emergency remote learning not only during but after the pandemic, focusing on goal-setting, one of the key element of self-regulated learning.

Keywords: emergency remote learning, online learning, goal setting, self-regulated learning
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1. Introduction

In spring 2020, educational institutions across the globe had to shift their face-to-face education to online classes in response to the coronavirus disease 2019 (COVID-19) outbreak. This move is described by adjectives such as “abrupt”, “unprecedented” (Teräs et al., 2020) and “staggering” (Hodges et al., 2020) in terms of the effects it caused to institutions, teachers and students on a global scale.

Studies about online learning have been conducting for decades, starting from the appearance of computer-based learning which is believed to occur at the second half of last century (Soumik Sarkar, 2020). However, since the global use of online learning during the COVID-19 pandemic, this area of research has gained more interest than ever among educational researchers. When I search for papers about online learning using the mentioned keyword, a steady rise in the number of research can be seen starting from the first pandemic year. Respectively, there are 2441, 3299 and 5671 articles and literature found in the years 2019, 2020 and 2021. The figure of 2021 (5671) is more than double (170% increased) compared to that of 2018 (2104), the last year of non-COVID-19. These data are obtained from Scopus, the largest abstract and citation database of peer-reviewed literature.

Research about online learning will certainly continue to develop even after the pandemic, especially now when we have realized that this fight against coronavirus could take years. Nevertheless, it is crucial to highlight that online learning under the circumstance of the COVID-19 pandemic is relatively different to other forms of online learning due to its social context. One of the most important distinction is the lack of a “careful instructional design and planning, using a systematic model for design” (Robert & Tonia, 2015), which is caused by the sudden shift from face-to-face learning. Therefore, researchers have proposed a

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1 What is Scopus about?, https://service.elsevier.com/app/answers/detail/a_id/15300/supporthub/scopus/
particular term for the form of learning which is delivered under these pressing circumstances: emergency remote learning (Hodges et al., 2020).

The main source of my motivation is to delve deeply into the emergent notion of ‘emergency remote learning’, which I will discuss in more detail in the Theoretical Framework section.

2. Theoretical framework

According to Grant & Osanloo (2014), theoretical framework is one of the most fundamental aspects in the research work. Theoretical framework helps explain the application of a theory in the study and provide a strong evidence of academic standards and scholastic functions. In this study, theories’ role is to form my research motivation and aims and to give framework for my interview protocol as well as coding scheme. The fact that my research is both theory-driven and data-driven furthers the salience of having a solid supporting system from available theories.

I chose to dive deeply in two main branches of theories. First, I sought to explore emergency remote learning (ERL), a novel term with remarkable points about new characteristics of online learning in the COVID-19 pandemic. Being aware that there is still little research on ERL, I set my first responsibility is to reread and organize authors’ explanation of this phenomenon in a logical and comprehensive manner to get my readers clarified what kind of situation I am mentioning and what context my study grows from. Second, goal-setting is theoretically examined putting on two umbrellas which are self-regulated learning (SRL) and the achievement goal theory (AGT). By putting goal-setting in the entire process of self-regulated learning, I emphasize why setting goals is important for learners to regulate their studies, especially in challenging situations. Moreover, I use achievement goal theory as tools to classify goals. Although I acknowledge that there are several dimensions of goals we can investigate via theories, such as goal-setting and task performance (Locke & Latham, 1991),
goal-setting theory of motivation (Lunenburg, 2011), I ended up simplifying the grounding of this study to only the salience of goals and the classification of goals. Those are most relevant and helpful in terms of answering my research questions.

The following section will give more scientific evidence of each theory.

2.1. Emergency remote learning (ERL)

There are unprecedented reports on how online learning has hindered students’ learning during the pandemic. Common challenges are that students do not feel confident about their competences to participate in online learning, or that all stakeholders did not have chances to prepare properly to the situation (Tarteer et al., 2022). Finnish university teachers also stated that a sudden shift to distance learning “had left no time for proper pedagogical design” (Teräs et al., 2020, p. 5). When it comes to wellbeing, the staggering speed of school closure has led to a high level of stress in students, instructors and institutions worldwide. It is undeniable that there are new forms of challenges which would certainly lead to new forms of consequences in learning and teaching. Thus, online learning during COVID-19 possesses unique characteristics that need to be further researched on.

In respond to that demand, researchers have been seeking new notions for the phenomenon of online learning during COVID-19 pandemic. For instance, Millman (2020) described the situation as “pandemic pedagogy” (as cited in Tulaskar & Turunen, 2021), while Tsang and colleagues nominated the term “COVID-19 online learning (CoOL)” based on the argument that CoOL “has differed from conventional online learning due to the limited time that students, instructors, and institutions had to adapt to the online learning platform” (Tsang et al., 2021, p. 1). However, the terms have not been used widely, and tends to be a temporary term which would be likely to fade out when the COVID-19 pandemic ends and could not be used in the similar crisis-ridden contexts in the future. Therefore, I would like to focus on the second nomination which I consider more remarkable. Specifically, in 2020, Charles Hodges,
Stephanie Moore, Barb Lockee, Torrey Trust and Aaron Bond proposed the term ‘emergency remote teaching’ (ERL). To my knowledge, this is the first article officially offered this concept. They stated,

Here, we want to offer an important discussion around the terminology and formally propose a specific term for the type of instruction being delivered in these pressing circumstances: emergency remote teaching. (Hodges et al., 2020, p. 4)

Building upon previous theories and literature on online learning, Hodges and colleagues argued that there is a significant distinction between “the normal, everyday type of effective online instruction” with “emergency remote learning” (ERL), what we did under the pressure of a crisis, in a hurry and was supposed to be temporary (Hodges et al., 2020). Focusing on the definition part of the article, I summarize three core elements of ERL as following: (1) Learning design: not being well-planned and not being designed to be online from the beginning, suppose to return to face-to-face or blended or hybrid format once the crisis has come to an end; (2) Timeframe: being temporary and being pushed to go to practices in a hurried manner (3) Support system: not taking into consideration the “ecosystem of learner supports” which play the similar roles to “infrastructure exists around face-to-face education such as library resources, housing, career services, health services, and so on” (Hodges et al., 2020) (see Figure 1). This three-element construct plays a crucial role in helping to “divorce” (Hodges et al., 2020) ERL with normal online learning or effective online learning.

In this study, I borrow the term “emergency remote learning” (ERL) from this development of Hodges and colleagues. A small note here is that I choose to use “learning” instead of “teaching” to show my emphasis on students’ side, while still not changing any dimension in the definition of ERL, as the authors perceived “teaching” as “the concerted sharing of knowledge and experience” (Hodges et al., 2020, p. 4).
After Hodges et al. (2020)’s proposal of the term ‘emergency remote teaching/learning’, in only 2 years, it has gained an impressive citation impact. According to Scopus, to this point (17th April 2022), there have been 1,254 documents cited Hodges et al. (2020)’s article. This is a notable citation count given the fresh nature of the term, and indicates the influence of the academic work (Leydesdorff & Milojević, 2012). Figure 2 and 3 illustrate the distribution of documents that cited Hodges and colleagues’ proposal by year and by subject area.

Figure 2.

Distribution of Documents that Cited Hodges et al.’s article by Year (statistic from Scopus)
Figure 3.

*Distribution of Documents that Cited Hodges et al.'s article by Subject Area (statistic from Scopus)*

Providing a critical lens into the unique characteristics of ERL, the terminology has been used in numerous studies that examine online learning during the pandemic. A literature review on ERL presented in the next section will discuss this in more detail.

Because of those nuanced theoretical discoveries, I decided to choose ERL not only as a term to build language consistency for this thesis, but also as a theoretical framework to understand main natures of online learning in the pandemic. Personally, as a student of 2020, I have a deep empathy with plentiful opinions that participants from above studies as well as
participants in my own study shared, and I seriously want to highlight the distinction of ERL in the history of online learning. Borrowing Hodges et al.’s explanation of ERL’s three core elements, I aim to analyze higher students’ adaptation to the emergency situation, focusing on their goal-setting phase.

2.2. Goal-setting

2.2.1. Goal-setting as a key process in self-regulated learning (SRL)

Self-regulated learning (SRL) is a process to metacognitively, motivationally, and behaviorally enhance learning (Zimmerman & Schunk, 2001). Due to its influence, SRL has become “one of the most important areas of research within educational psychology” (Panadero, 2017, p. 1). Over nearly four decades of research, SRL is proved to be critical for successful learning (Dignath and Büttner 2008). Notably, SRL helps students to be more motivated and persistent during difficult tasks (Boekaerts, 2011; Perry, 1998).

In challenging situations, not all processes and phases of SRL are equally hindered. Indeed, harsh condition are proved to enable students’ regulatory learning action (Hadwin et al., 2011; Järvelä & Hadwin, 2013; Perry, 1998; Pintrich, 2000; Zimmerman, 2000, as cited in Virtanen, 2019). Furthermore, in a study conducted by Biwer et al. (2021), a cluster of participants stated that they were benefited by the ERL in terms of saving travelling time, being able to plan their days autonomously and feeling more in control of their day.

To put in the system of SRL, goal-setting is evidently not a conventional process in the cyclical procedure, but plays a decisive role in the success of SRL. Zimmerman and Moylan (2009)’s cynical model of SRL illustrates that goal-setting is placed in the forethought phase, the first phase in four primary phases of this recognized learning model (Figure 4).
Figure 4.


In addition, Panadero & Alonso-Tapia (2014) included goal-setting in four basic elements of SRL definition, which are: (1) control of cognition, (2) behavior control, (3) motivation control and (4) to achieve the goals they have established. Correspondingly, Paris, Byrnes and Paris (2001) argued that “self-regulated learning requires that students choose appropriate goals as the object of their effort” (p. 269), which means goal-setting is among the pre-acquisition for SRL to occur. This is in line with the claim that Locke & Latham (2004), author of the well-known Goal Setting Theory, had made that goal-setting is one of the “key self-regulatory processes”. In sum, goal-setting has a crucial role in SRL, thus students can barely reach their highest potential, accomplish learning satisfaction as well as experience the meaningfulness of education without proper goal-setting strategies.

2.2.2. Achievement goal theory (AGT)

Emerging from social-cognitive theories of achievement motivation in the 1970’s and early 1980’s, achievement goal theory (AGT), introduced and developed by Carole Ames, Carol Dweck, Martin Maehr and John Nicholls at the University of Illinois, has been the
predominant theoretical framework in achievement motivation in educational settings (Elliot & Hulleman, 2017; Senko, 2016). It has become very popular and generated a very sizable body of research (Urdan & Kaplan, 2020).

To summarize, achievement goal theory classifies goals into two categories which are mastery goals and performance goals. Accordingly, mastery goals (also known as learning, or task goals) refer to goals that attempt to master a skill or task in order to improve competence (Nicholls, 1975, 1984). When following mastery goals, learners desire to foster new skills and achieve a state of mastery drawing on self-referenced standards (Ames, 1992). Meanwhile, performance goals (also known as ego, or ability goals) are goals that emphasize on demonstrating learners’ competence (Nicholls, 1975, 1984). Students with performance goals tend to focus on their ability in comparison with other students, with a sense of competing, for the purpose of gaining public recognition (Ames, 1992). According to Urdan & Kaplan (2020), mastery goals refer to a task-based standard of competence, while performance goals point to an interpersonal comparison standard.

It is essential to highlight that in the present study, I did an important interpretation that goals which are related to adapting to the programme requirements such as to pass courses, to graduate, to submit obligatory assignments and papers are classified into the cluster of performance goals. I also identify performance goals by language signs such as “I have to”, “There was basically no choice”, “I am pushed for”, “compulsory”, “required” (all these references are from this study’s data). To explain, firstly, it is because I could not find any appropriate categories for those goals from literature I read within the given time. Secondly, I wanted to simplify the criteria by relying on internal/external goals motives trait, which indicates that if students set a goal based on their own need of learning and improvement then it is a mastery goal; otherwise, if the motivation is generated from external pressure and is more likely to perform competencies according to obligatory requirements from the
programme so it is a performance goal, despite the fact that it is not related to any of the concepts such as ego, competing, comparison, gaining public recognition, etc. In other words, mastery goals imply goals that are proactive, while performance goals tend to be passive or driven by external standard.

With these nuanced references and considerations, I developed individual definitions of mastery goals and performance goals for this study as following:

**Table 1.**

_A definition system of mastery goals and performance goals developed for this study_

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition and references</th>
<th>Source of motivation</th>
<th>Trait</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mastery goals</td>
<td>students aim to foster new skills (Ames, 1992), improve competence (Nicholls, 1975, 1984)</td>
<td>Internal</td>
<td>Proactive</td>
</tr>
<tr>
<td>Performance goals</td>
<td>students aim to demonstrate competence (Nicholls, 1975, 1984), compete with others, gain public recognition (Ames, 1992) or achieve obligatory requirements (my elaboration)</td>
<td>External</td>
<td>Passive</td>
</tr>
</tbody>
</table>

In 1996, to elaborate on the motivational component of achievement goal theory, Elliot and Harackiewicz incorporated the approach-avoidance valence into the theory. Accordingly, _approach-performance goals_ are motivated by the combination of the need to achieve and the fear of failure, and _avoidance-performance goals_ are only driven by the fear of failure, which means learners motivate themselves to avoid looking incompetent and stupid. Later in 2001, drawing on the original concept of achievement goal theory and the incorporation of approach-avoidance valence, Elliot and McGregor had developed a 2x2 achievement goal framework (Figure 5), which serves as a systematic construct to evaluate learners’ goals.
Regarding learning effectiveness, research has conclusively indicated that mastery goals results in higher degrees of performance than performance goals (Button, Mathieu, & Zajac, 1996) and are linked with more successful self-regulation strategies (Kanfer, 1990; Payne, Youngcourt, & Beaubien, 2007). In addition, the approach valence adds valuable efficiency to the mastery goals category, meaning that mastery-approach goals lead to the most optimal learning results, whereas performance-avoidance goals are connected to maladaptive outcomes (Hulleman & Senko, 2010).

Due to objectives of the present research, I focus on investigating which type of goals can facilitate learners in challenging milieus of learning. I support Urdan and Kaplan (2020)’s statement that when students put their foci on learning, understanding, or improving their competencies (mastery goals), they may be more likely to be resilient when confronting setbacks or obstacles to make progress in their learning. In contrast, if success is defined as overperforming peers and demonstrating intelligence (performance goals), students may be easier to give up when encountered with initial failure.
Given the scope of this thesis, which is not predominantly about goals classification, I decided to not examine further to the valence dimension of goals (the approach-avoidance orientation), but rather only take into account the mastery/performance orientation, with an assumption that students with mastery goals are more likely to be satisfied and resilient during the ERL.

3. Literature review

In this section, I will not do a literature review for achievement goal theory (AGT) due to the fact that I just use it as a tools to categorize goals, meaning the history of research on it would not contribute remarkably to my work. Moreover, I have explained to a certain extent about what groundings I based on to come up with the classification decision in the previous section.

In the following sub-sections, I will go through how researchers have been working on emergency remote learning (ERL) and self-regulated learning (SRL) (focusing on goal-setting process). Excellent examples of implementing ERL will be given to strengthen the theory I borrow. Furthermore, a brief report on how researchers have been considering goal-setting within the scope of SRL will point out what is still missing. I argue that goal-setting deserves to be paid more uniquely attention to when it comes to self-regulated learning under challenging circumstances.

Notably, I write an extra sub-section to develop my ideas on international students as a special group of learners during the COVID-19 pandemic, since I notice few studies concentrate on them despite the fact that they were not equal to local native students in terms of what they had to go through when the pandemic hit. In this part, literature about motivation and goals when studying abroad is investigated to indicate the salience of goals to this group of students, as well as scientific gap that need to be bridged.
3.1. Emergency remote learning (ERL)

“Emergency remote learning” is still a novel term. According to Scopus, the number of studies including this keyword in their titles, abstracts and keywords (TITLE-ABS-KEY searching) is 0 throughout three years 2017, 2018 and 2019, not to mention the years prior to 2017. The concept only emerged from 2020 with 20 studies and the number robustly went up to more than double (175% increased) in 2021 with 57 documents and is promising with 21 documents in 2022 (updated 17th April 2022). These are still relatively modest numbers given the current situation that the pandemic has never been ending, as well as the possibility of similar crises in the future. This statistic indicates that deeper attention is needed from scientists for the emergent notion.

Within the scope of this study, I analyzed 29 most relevant articles that include “emergency remote learning” in their titles. I consider this number valid given the novel characteristic of the concept. Subsequently, a thematic report has generated, reveals different characteristics and trends of research on ERL.

Among most popular researched aspects is students’ experiences and challenges during ERL. Accordingly, researchers found that students confronted difficulties such as stress, anxiety, uncertainty (Irembere & Lubani, 2020); scheduling, distractions, pessimistic emotions, longer durations and concentration (Tulaskar & Turunen, 2021) during ERL. Another study done in Indonesia focusing on technological aspect revealed obstacles such as device issues, internet connectivity, technology costs, and lack of technology skills (Rahiem, 2020). Regarding students’ acceptance of ERL, Law (2021) proved that most of students have a positive attitude in the ERL delivery, while Pilav-Velić et al. (2021) demonstrated a relationship in which more innovative students have better ERL acceptance compared to students with a lower personal innovativeness result. Research also desired to investigate students’
satisfaction toward ERL and found only neutral regarding the overall satisfaction score on ERL (Ho et al., 2021).

In terms of students' adaptation to ERL, Biwer et al., (2021) found four adaptation profiles and labeled them based on changes in their resource-management strategies: the overwhelmed, the surrenderers, the maintainers, and the adapters. A growing body of research also sought to explore the method of teaching in ERL. For example, Howley (2020) suggested an approach to adapt inquiry learning worksheets for introduction to computer science for students, while (Zupita et al., 2021) proposed PQ4R as a method that could be used to improved students' homework. Whereas, Almutairi et al. (2021) performed a systematic view by suggesting a novel framework for facilitating ERL during the COVID-19 pandemic. In terms of technological platforms used, WhatsApp and Discord were examined through two different studies from the same group of authors of Wulandari & Mandasari (2021).

Although many recent studies have been investigating the multifaceted characteristic of ERL, there is little research regarding the process of goal-setting in ERL. This study sought to fill the gap in knowledge of ERL focusing on goal-setting process, with an assumption that ERL does not hinder or benefit different processes of learning to the same extent, yet is more impactful to Forethought processes such as goal-setting, in comparison to ones in Performance Phase and Self-reflection Phase.

3.2. Goal-setting as a key process in self-regulated learning (SRL)

Goal-setting has been researching for decades within the scope of self-regulated learning (SRL). Most of research consider goal-setting as a phase in SRL and probed to examine the impact of this process to the whole SRL, in the correlation with other processes such as strategic planning, self-efficacy, self-motivating, etc. For example, Sanyoto & Saloom (2020) placed goal setting among other elements such as self-efficacy, interest and peer support and
found that they altogether have impact on SRL, of course at different levels. Another study from Southeastern United States explored the impact of goal setting on the use of self-regulated learning by at-risk community college students, in relation to self-efficacy, and indicated that at-risk college students were likely to have an unrealistically high level of self-efficacy, which may hinder their motivation in setting goals and thus interfere with improving their learning strategies (Hathaway, 2016). Research has also recognized the motivational supportive role of goal-setting in SRL, as Cheung (2004) pointed out that goal-setting can serve as effective motivational tool in enhancing self-regulated learning process, thus academic performance for college students.

Additionally, many studies are performed centralizing criteria to establish goals as well as influential factors to students’ goal-setting. For instance, the assessment criteria and the performance level students want to achieve are stated to be two crucial variables that students consider when setting goals (Winne & Hadwin, 1998). Regarding successful predictive factors, in the Goal Setting Theory, Locke and Latham (1990) proposed characteristics of goals that are more likely to help learners succeed such as specific, challenging and achievable. Similarly, Zimmerman (1990) claimed that high self-regulated learners established hierarchical, specific, proximal and challenging goals for themselves which enables them to attain more distal outcome objectives.

In sum, there is no doubt that goal-setting is an important process in the Forethought Phase that is benefit, or even, decisive to the effectiveness of SRL. In addition, there are several strategies that are proved to enable effective goals setting in SRL.

As per my initial investigation, to this point, there has been few studies put goal-setting in the context of ERL. Rather than that, researchers preferred looking at the whole process of SRL with the correlation between multi phases and processes (Cheung, 2004; Hathaway, 2016; Sanyoto & Saloom, 2020). Additionally, they considered SRL in the general challenging
circumstances rather than focusing on only the novel term of ERL (Hadwin et al., 2011; Järvelä & Hadwin, 2013; Perry, 1998; Pintrich, 2000; Zimmerman, 2000, as cited in Virtanen, 2019). This might be the missing gap in researching goal-setting within the scope of SRL.

Drawing partly on my personal experience as a student of 2020 and my intuition of how this group of students were struggling during the ERL, I sought to explore specifically the goal-setting process in SRL, with the assumption that goal-setting is among processes that are interfered with most strongly by the ERL, especially for international students. More insights about this group of higher students will be presented in the following sub-section.

3.3. The missing gap regarding the group of international higher students

Regarding research on SRL in general and goal-setting in particular, on the one hand, many studies have already highlighted the importance of those to higher education students. For example, Virtanen et al. (2015) claimed that SRL skills are especially necessary for higher education students because they are different to other levels of education due to the autonomy, motivation, age group, skills and vision. Similarly, Lindblom-Ylänne & Lonka (1998) found that higher education students still lack of SRL skills, the skills that can help them succeed in an autonomous learning circumstance as well as prepare them for very demanding responsibilities in the future.

On the other hand, there is little research focusing on examining SRL and goal-setting in the group of higher international students (higher international students are defined as students come to other countries to study in higher educational institutes). Conversely, it can be clearly interpreted from research that goal-setting is an essential phase of this cluster’s learning starting from very first moments when they fill in the application. For instance, studies have found the most popular reasons are to enhance worldview, global perspective, and cross-cultural effectiveness (Kitsantas, 2004; Zimmermann & Neyer, 2013, as cited in
Haisley et al., 2021) as well as to improve career prospects (Crossman & Clark, 2010; Franklin, 2010; Potts, 2015; Wiers-Jenssen, 2008, as cited in Haisley et al., 2021). Remarkably, in the same document, Haisley et al. (2021) served a list consisting eight motivational factors which are: (1) Language Learning, (2) Cultural Exploration Travel and Tourism, (3) Academic Enrichment, (4) Personal Escape, (5) Avoid Social, (6) Limitations, (7) Aspiration to Work in Host Country and (8) Attitude toward Host Country (p. 192).

Similar to Haisley et al. (2021), Anderson et al. (2015) sought to discover international students’ motivation to go to another country to study. The authors found that there four groups of reason which are (1) world enlightenment, (2) personal growth, (3) career development and (4) entertainment (p. 43-44).

To look at mentioned motivations, there is an obvious relation could be found between those and the need to be present in the host country, for example to be able to get immersed in the language, travel and explore, as well as to investigate the job market in the country for the purpose of job seeking. Put differently, students come to other countries not only to learn knowledge, theories and get lectures delivered, but also to seek for experiences, to elaborate their world view and to discover within themselves. International students apply for abroad programmes with aims, visions and hopes in their mind, drawing from previous experiences and their internal scripts. Most of them do not have the chances to come to the host country before their studies start, which mean almost all their goals are drawn from mindful inspiration. Coming back to the situation of ERL, it is undeniable that these ambitious goals of international students have been interfered with to a considerable extent.

Accordingly, an adequate attention to goal-setting phase of international students is what I found still missing in literature of SRL and goal-setting. Therefore, when designing the research, I intentionally aimed to look for higher students who are non-Finnish. This is drawn from my personal case as well as observation about peers around me.
4. **Aim and objectives**

With nuanced theories and literature review under consideration, the present study aims to examine the goal setting and regulation of higher international students in the context of emergency remote learning (ERL). Drawing on interviews with students, this study addresses four major research questions:

1. What type of goal did students set during the ERL?
2. How did the ERL influence students’ goals?
3. What challenges did students confront when regulating goals during the ERL?
4. What strategies did students use to regulate goals during ERL?

5. **Methodology**

It is evident that in a comfortable and truthful dialogic atmosphere, “complex reactions and feelings are best given meaning”, compared to “mere reporting of experience” (Crouch & McKenzie, 2006, p. 487). This fact guides me to find the appropriate methodology for my research, which is to inquire how student set their goals during the emergency remote learning (ERL), focusing on challenges encountered in this unusual period of time. Accordingly, I selected qualitative method and designed individual in-depth interviews with the purpose of gaining meaningful data from conversations. I believe that, by enabling interviewees’ possibility to “give color and warmth to cold facts” (Brounéus, 2010, p. 131), in-depth interviews can generate new knowledge and insights, which is methodically appropriate for investigating a new phenomenon as ERL.

5.1. **Participants**

In this research, a total of 8 students were recruited for the study via an invitation poster (Appendix 2). The size of my interviews is drawn on Crouch and McKenzie (2016)’s argument about the remarkable veracity and validity of small samples (less than 20) in
interview-based qualitative research. Size decision is not necessarily related to the scope and time limit of my thesis, but mainly due to the reflection characteristic of my research objectives. That is to say, recruiting a modest number of participants is the most ideal way to delve in depth as well as to embrace students' reflective thoughts about learning in a highly independent and isolating milieu such as ERL.

All of the interviewees started their studies in autumn 2020, and at the interview time, they were in the second year of their Master's programme in a Finnish university. They are international students (non-Finnish). General information about participants is summarized in the following Table 2:

Table 2.

<table>
<thead>
<tr>
<th>Group</th>
<th>University</th>
<th>Number of interviewees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>University of Oulu</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>University of Turku</td>
<td>1</td>
</tr>
</tbody>
</table>

All interviewees (100%) gave consent to the study. Consent form is included in Appendix 4 of this thesis.

5.2. The making of an interview protocol

The interview protocol was built based on my research questions, the theoretical framework of emergency remote learning (ERL), self-regulated learning (SRL) achievement goal theory (AGT), as well as the instruction from Chapter 16 of the book Research Methods in Education 6th edition (Cohen et al., 2007). Interviews are semi-structured and individual in-depth. The interviews combine qualitative approach (open-ended questions) and quantitative approaches (scaled questions), emphasizing on the former. Whereas qualitative data plays the
most vital role in my thesis as explained in the first paragraph of this chapter, quantitative questions with scaled response mode offer me insightful information about students’ situated awareness.

Firstly, open-ended questions ask participants about their goal-setting strategies including the following categories:

- **Demographic questions:** students were asked to introduce general data of their studies, location of living and other relevant information
- **Descriptive questions:** students were asked to describe their goals during and after ERL
- **Experience questions:** students were asked to share their challenges during ERL
- **Behavior questions:** students were asked to share tips and strategies to regulate their goal-setting during ERL

Secondly, scaled questions query students’ estimation of online learning time as well as the level of their social interaction during and after ERL (row 1 & 2, Table 3). I also gathered extra information about students’ evaluation of goal traits, influential factors and satisfaction degree to elaborate for the above qualitative data (row 3, 4 & 5, Table 3). To decide the scales, I referred to Vagias & Wade (2006)’s instruction of Likert scale response options.

**Table 3.**

**Quantitative questions and types of responses**

<table>
<thead>
<tr>
<th>No</th>
<th>Question content</th>
<th>Number of question</th>
<th>Type of response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Amount of online learning time</td>
<td>2</td>
<td>Frequency – 6 points, from ‘never’ to ‘100%’</td>
</tr>
<tr>
<td>2</td>
<td>Level of social interaction of students during ERL</td>
<td>2</td>
<td>Frequency – 4 points, from “never” to ‘often’</td>
</tr>
<tr>
<td>3</td>
<td>Students’ evaluation about traits of their goals</td>
<td>2</td>
<td>Level of Agreement – 5 points, from ‘strongly disagree’ to ‘strongly agree’</td>
</tr>
<tr>
<td>4</td>
<td>Factors that influence students’ goals</td>
<td>2</td>
<td>Level of Influence – 5 points, from ‘not at all influential’ to ‘extremely influential’</td>
</tr>
</tbody>
</table>
Before conducting official interviews, I did a mock interview with one of 8 participants on 18 March 2022. The purpose is to test the alignment of the protocol with research objectives. Specifically, I wanted to know whether the protocol can help me answer my research questions, whether there are any questions should be added, modified or excluded. Moreover, I wished to see if participants face any difficulties in the process. After the mock interview, I made several modifications to the interview language, question sequence as well as the visualization aspect of the protocol. At this point, the final interview protocol was made.

The full protocol can be found in Appendix 1 of this thesis.

### 5.3. The interview conducting

The official interviews were conducted from 21 March 2022 to 28 March 2022. There were 8 interviews being conducted via Microsoft Teams meeting platform. The interview centered on goals students set for themselves at the beginning of their first year and at the beginning of their second year, challenges they confronted during the emergency remote learning (ERL) and strategies they used to cope with the situation.

When interviewing, I used Google Slide to visualize the structure. I set different background colors for Year 1 (blue) and Year 2 (yellow) to avoid getting confused about which year was mentioned. This is thanks to feedbacks from the mock interview.

All interviews were recorded by Microsoft Teams. The average interviewing duration is 44 minutes 11 seconds (manually calculated by myself based on the recording length shown on Microsoft Teams history).
5.4. Content analysis

5.4.1. Creating the final transcripts

After interviewing, I downloaded the transcripts that were created automatically by Microsoft Teams. For each transcript, I opened the respective recording again and, at the same time, looked at the text in order to compare the written and spoken version of each interview. According to my own listening and judgement, I evaluated the level of accuracy and made any editing needed. Finally, all names of participants are changed to pseudonyms. Also, sensitive information is excluded. File names are based on the pseudonyms.

5.4.2. Content analysis

Following Cohen et al., (2007)’s instruction of content analysis, I implemented a model of 5 stages as following:

Figure 6.

5 stages of content analysis in this thesis (adapted from Cohen et al., 2007, p. 483-487)

Stage 1: Extract the interpretive comments that have been written on the data

Stage 2: Sort data into key headings/areas

Stage 3: List the topics within each key area/headiing and put frequencies in which items are mentioned

Stage 4: Go through the list in stage 3 and put the issues into groups (avoiding category overlap)

Stage 5: Comment on the groups or results in stage 4 and review the message
Stage 1: Extract the interpretive comments that have been written on the data

In this stage, I read through the whole set of qualitative data and highlighted meaningful data. Those are data that are aligned with my pre-determined coding system. Also, I noticed new possible codes that I might include in the available coding system. I noted down all these notices.

Stage 2: Sort data into key headings/areas

“As word data are laborious to process, and as several powerful packages for data analysis and processing exist, researchers will find it useful to make full use of computing facilities” (Cohen et al., 2007, p. 488). Starting from this stage, I used NVivo 12 to code the interpretative comments that have been found on the data. Meaningful piece of data that were highlighted before were put into respective categories. Coding construct is based on 4 research questions and is shown in Figure 7. More detail and examples are included in Appendix 3.

As can be seen from Figure 7, there are categories and sub-categories. It makes the coding process complicated and confusing. To avoid miscoding, I divide the coding into 4 rounds, based on 4 research questions, in which I work with a specific category on each round. For example, in the first round, I read through all 8 interviews and only focused on whether the shared goals are mastery-oriented or performance-oriented. Table 4 gives more detail of these 4 coding rounds.

Table 4.

Rounds of coding

<table>
<thead>
<tr>
<th>Round</th>
<th>Coding rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Goals classification</td>
</tr>
</tbody>
</table>
Stage 3: List the topics within each key area/heading and put frequencies in which items are mentioned

In this study, stage 3 was smoothly supported by NVivo 12. By clicking on the name of a specific code, I had a separate report of relevant comments. I read through them again and detected any mistake if available. This action was repeated for each code, until I felt everything was categorized properly based on the coding construct.

Stage 4: Go through the list in stage 3 and put the issues into groups (avoiding category overlap)

My coding is both framework structured nature and emerging nature. To specify, I use the pre-determined coding rules and elaborated them with new appearing codes, meaning whenever I noticed a new feature in the data, I considered create a new code and find a place in the available system to organize it logically. For instance, when coding Goals Classification, there was a new sub-category appeared and then was named Adaptive Goals. Similarly, when coding Challenges during ERL, there was one student mentioned that they experienced more advantages than disadvantages. As a result, I created a new category named Advantages over disadvantages. New emerging codes are italic in Figure 7.

It is notable that this is both theory-driven and data-driven research. In Figure 7, it can be seen that round 2 and round 4 are totally data-driven.
**Stage 5: Comment on the groups or results in stage 4 and review the message**

In this stage, I need to draw attention to general and specific points and note them down for the findings. For instance:

- There are different orientation to set different types of goals in Year 1 and Year 2,
- Not all goals changes from Year 2 are due to the ERL,
- There are high frequencies of mentioning instructional challenges and emotional and motivational challenges, etc.

### 5.4.3. The elimination of unnecessary codes

As can be noticed, I did not use all data obtained from the interviews. In the process of data analysis, I realized that too much data interpretation could make my study not well-organized and cause confusion in readers. Therefore, I excluded some data gotten and modified the coding system to have the final version with 4 rounds, 4 categories as seen. For example, I used to have a category named Goals changing direction, in which I sorted changes into four groups named Lose goals, Loose goals, Shift Goals and Specify Goals. However, I soon realized that I did not need this sort of data because it was hard to be put into the available

---

**Figure 7.**

**Coding construct**

<table>
<thead>
<tr>
<th>Goals classification</th>
<th>Reasons for goals changes</th>
<th>Challenges during ERL</th>
<th>Tips and strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Mastery goals</td>
<td>• 2nd year pressure</td>
<td>• Emotional and motivational challenges</td>
<td>• Communicate</td>
</tr>
<tr>
<td>• Performance goals</td>
<td>• Familiarity with the programme</td>
<td>• Environmental challenges</td>
<td>• Relax and be flexible</td>
</tr>
<tr>
<td>• Adaptive goals</td>
<td>• Better knowledge and skills</td>
<td>• Instructional challenges</td>
<td>• Journaling</td>
</tr>
<tr>
<td></td>
<td>• Change interest</td>
<td>• Social instructional challenges</td>
<td>• Set proximal goals</td>
</tr>
<tr>
<td></td>
<td>• Change location</td>
<td>• Strategic challenges</td>
<td>• Be realistic</td>
</tr>
<tr>
<td></td>
<td>• Mental health issues</td>
<td>• Advantages over disadvantages</td>
<td>• Chunking</td>
</tr>
<tr>
<td></td>
<td>• External jobs</td>
<td></td>
<td>• Disengage</td>
</tr>
<tr>
<td></td>
<td>• Other challenges</td>
<td></td>
<td>• Find the strong WHY</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Shift the motive sources</td>
</tr>
</tbody>
</table>
neat system with 4 codes aligned with 4 research questions. Ultimately, I eliminated the code. This is one of the lessons about designing better interview protocol for my future studies.

5.4.4. Inter-rater reliability

To elaborate on validity of the study, I invited a second coder to code 3 out of 8 interviews (25%). The ethical quality of the research is guaranteed by the fact that this second coder is from University of Saarland, Germany and she does not know any of the interviewees.

My coding includes values that are on a nominal scale, therefore I wanted to compute the inter-rater agreement. To do this, I prefer a simple agreement percentage calculation rather than a popular kappa. That is to say, the second coder was assigned to assess all targets independently (without seeing my assessment). After that I compared the two assessments and calculated the number/percentage of the agreed and disagreed items.

Table 5.

*Percentage agreement between two coders*

<table>
<thead>
<tr>
<th>Interview</th>
<th>Disagreement</th>
<th>Percentage of agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview 1</td>
<td>3 out of 13</td>
<td>76.92</td>
</tr>
<tr>
<td>Interview 2</td>
<td>2 out of 9</td>
<td>77.78</td>
</tr>
<tr>
<td>Interview 3</td>
<td>2 out of 12</td>
<td>83.33</td>
</tr>
</tbody>
</table>

As Table 5 shows, percentage of agreement is relatively high (lowest 76.92% and highest 83.33%), which indicates that the second coder agreed with almost of my choices. Given the fact that most of the codes include more than 2 categories (averagely 5.8 categories), I personally evaluate that this study performs a highly valid coding which can reveal reliable results.
6. Findings

This section will present major findings from data analysis, using two sets of data which are quantitative data and qualitative data. The findings contribute to current awareness of goal-setting in emergency remote learning (ERL) circumstances in numerous aspects such as the nature of ERL, students’ tendency to choose goal type, how ERL impacted the changes, main challenges confronted as well as students’ goal strategies to cope with ERL.

6.1. Understanding the actual situation of ERL

While theories and literature review show several characteristics of ERL, I still wondered how it actually was in the perception and experiences of students of 2020. In order to do that, in this part, I present the descriptive statistic results obtained from the quantitative set of my data. Although this data set is small-sized (8 participants), I still get meaningful report about a natures of ERL, especially the *persistency*.

**Table 6.**

*Description of quantitative data statistics*

<table>
<thead>
<tr>
<th>Categories</th>
<th>N=8</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean (%)</td>
<td>SD</td>
</tr>
<tr>
<td><strong>Amount of online learning time</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 1</td>
<td>75</td>
<td>29.58</td>
<td></td>
</tr>
<tr>
<td>Year 2</td>
<td>67.5</td>
<td>17.14</td>
<td></td>
</tr>
<tr>
<td><strong>Level of social interaction</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meet your cohort</td>
<td>28.125</td>
<td>19.52</td>
<td></td>
</tr>
<tr>
<td>Meet your teachers</td>
<td>18.75</td>
<td>16.54</td>
<td></td>
</tr>
<tr>
<td>Enter the campus</td>
<td>37.5</td>
<td>27.95</td>
<td></td>
</tr>
<tr>
<td>Explore the host country</td>
<td>43.75</td>
<td>29.97</td>
<td></td>
</tr>
<tr>
<td>Year 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meet your cohort</td>
<td>43.75</td>
<td>10.83</td>
<td></td>
</tr>
<tr>
<td>Meet your teachers</td>
<td>34.375</td>
<td>12.11</td>
<td></td>
</tr>
<tr>
<td>Enter the campus</td>
<td>59.375</td>
<td>17.40</td>
<td></td>
</tr>
<tr>
<td>Explore the host country</td>
<td>53.125</td>
<td>19.52</td>
<td></td>
</tr>
</tbody>
</table>
Note. Before conducting Table 6 to demonstrate the description of quantitative data statistic, I made a translation from the linguistic scaled options to the numeric data. Regarding the amount of online learning time, *Never, Rarely, A moderate amount, Occasionally, A great deal, 100%* are translated to 0%, 20%, 40%, 60%, 80% and 100% respectively. Regarding the level of social interaction, *Never, Rarely, Sometimes, Often* are equal to 0%, 25%, 50%, 75% respectively (100% can be understood as *Always* but it is not available in the given scaled options because I decided that in this case, the highest level of social interaction could only be 75%). While the linguistic scaled options helped interviewees make their estimation easier, the translation enhances the comprehensiveness of my statistics.

6.1.1. The amount of online learning time

The descriptive statistical analyses (Table 6) shows that the estimated online learning time in Year 1 is relatively high (M=75, SD=29.58). 2 out of 8 students (25%) stated 100%, 6 students (75%) voted for ‘a great deal’. Overall, 100% students evaluated the amount of online learning time is from ‘a great deal’.

Remarkably, in Year 2, after the ERL, students still stated a great amount of online learning time (M=67.5, SD=17.14). The proportion in Year 2 is only 7.5% lower than Year 1. To specify, 5 of 8 students (62.5%) believed it is still ‘a great deal’, 1 student (12.5%) voted for ‘a moderate amount’, and 2 of 8 students (25%) chose ‘occasionally’. Figure 8 illustrates the comparison regarding online learning time between Year 1 and Year 2.

In sum, though students have more chances to attend face-to-face learning or hybrid learning from the second year, the amount of contact teaching is still modest. There is a consistent dominance of online teaching throughout two years of the classes of 2020. In other words, students of 2020 have never really stepped out of the impact of COVID-19 pandemic. I name
this the persistency of ERL and wish to elaborate this nature to the construct of ERL, particularly the time element.

**Figure 8.**

*The amount of online learning time in Year 1 and Year 2*

6.1.2. Students’ level of social interaction

To capture students’ degree of social interaction during and after ERL, I asked them to rate from Never to Often (4 scales). Looking again at Table 6, data reveals that in both Year 1 and Year 2, the lowest figure is to meet teachers (Year 1: 18.75%, Year 2: 34.75%). These proportions indicates that students meet their teachers less than rarely during the ERL and less than sometimes after the ERL.

From Year 1 to Year 2, the biggest change is to enter the campus (increases 21.875%). To interpret this, we can say that during the ERL, students are limited the most in terms of their opportunity to use infrastructure and facilities to support the learning (Figure 9). This is in line with one of three core elements of ERL which is the lack of support system which compensates for face-to-face infrastructure.
Students’ Level of Social Interaction During Year 1 And Year 2.

The following sections, focusing on qualitative findings, will delve deeper into students’ regulation of goal-setting during the ERL.

6.2. What type of goal did student set during the ERL?

When being asked about goals of the first year and second year, students recalled their memory which gives the study insightful information about what they aimed to achieve during and after the ERL. Table 7 shows that there is no great difference in the total number of coded references between mastery goals (9 references) and performance goals (8 references), though, the former is mentioned slightly more times compared to the latter. However, there is an obvious difference between Year 1 (during the ERL) and Year 2 (after the ERL). In particular, in the first year students tended to set mastery goals (7 out of 9 references) and in the second year, there have been a shift to performance goals (5 out of 8 references). Noticeably, there is 1 student said that she/he did not set proper goals and waited
to adapt to what would be taught in the following months. Therefore, I create a new category for this called *adaptive goals*.

**Table 7.**

*Type of goals coding results*

<table>
<thead>
<tr>
<th>Year</th>
<th>Mastery goals</th>
<th>Performance goals</th>
<th>Adaptive goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>7</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Year 2</td>
<td>2</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
<td><strong>8</strong></td>
<td><strong>1</strong></td>
</tr>
</tbody>
</table>

The following part will explore each year with examples from interviews.

6.2.1. Goals during the ERL

As mentioned, during the ERL (the first year), students tended to set more mastery goals than performance goals. Drawing from the interview, there is a considerable number of students shared that they did not think about grades or course requirements but focused more on improving their competences. For instance, Gabriel claimed:

> My goals were more [about] competencies, credits did not matter to me as they never do. [...] The goal was not just to pass, but maybe even focus on something I enjoy, that I'm really into. (Gabriel).

Echoing Gabriel, Anne were serious at the beginning of her studies when it comes to gaining useful knowledge to fulfill her passion on education. She shared:

> What I wanted to learn most about first year was technology enhanced learning and how to implement that into a classroom, what are the tools currently available, especially open source tools, not ones that you have to pay for it. And I really wanted to learn more about self-regulation, not just for students, but also for myself. Those are probably [two of] my three biggest goals for the academic results. (Anne).

In her statement, Anne showed that she seems to have her own questions before the studies in terms of educational technologies and self-regulation and she expected the current
programme to help her answer them. She also emphasized that those are among most burning goals of hers, which means mastery goals play a significant role in her goal-setting during the ERL. This mindset was shared by numerous students, who felt that they “don't have too big of an interest in that [grade]” (Gabriel) and they care more about “the feedback that you get from the teachers on how you've done things” (Edward) as well as the opportunities to “enhance [their] skills” (Maria).

Nonetheless, there are several students mentioned performance goals and showed their interests in achieving high grades or adapt what is expected from the programme. For example, Anne, who was known before by her first year’s meaningful mastery goals, also claimed that she aimed for high scores. Moreover, this was the first goal she referred to in our conversation.

As far as academic results, the goals and I set were that I really wanted to be a high scoring student. Uh, you know, get fours, fives. Thinking back to the learning profiles that we did, [I wrote that] my biggest goal for my academic was to get grades that accurately reflected the effort I put in. (Anne).

In another case, Johan did not mention about grading, but apparently focused on the course requirements. These external demands seem to be slightly stronger than his internal motivation during the first year, as he made it clear about the tendency to follow what is designed in advance and the purpose of passing courses.

There was basically no choice in terms of what I wanted to learn, because our personal study plan was already designed. […] I just needed to follow everything. If you ask what I wanted to learn: all of the courses that were provided, that is what I wanted to learn. At least I want to pass all those courses. (Johan).

It is interesting that there is one student who did not show any orientation toward either mastery goals or performance goals. Tom shared,

During the first period I came with a very open mind, to be honest. I always approach stuff with a very open mind and I set my goals based on the content. Without knowing what the content is I cannot set goals because I do not know what standards I should
have. For example, I really appreciate when it's a very structured program because it then enables me to just get lost in it, but in a meaningful way. And then I can set goals based on my experience rather than setting goals and try to make something out of it. (Tom)

Tom was referring to the type of adaptive goals which allow students to not necessarily set fixed objectives at the beginning of their studies, but rather experience then align their goals with what are taught in the programme. By saying “just get lost in it, but in a meaningful way”, Tom clearly showed that he was aware of the ultimate purpose which is to gain something “meaningful”. However, it seems that at that early point of time, Tom preferred general outcomes rather than too specific goals. It does not mean that he underestimated the importance of a proper goal-setting, it was more likely because he praised an open-minded way of regulating learning.

6.2.2. Goals after the ERL

Regarding the second year, students expressed more concerns about the required outcomes of the programme such as a thesis or the minimum number of credit to be able to graduate and graduate on time. As a result, they lowered their expectation of enhancing competencies, and gradually shifted it to a realistic goal which is to graduate. Addressing this pattern, Edward shared,

As far as the academic goals go, the only one that I have for this program is to graduate. (Edward).

The importance of this performance goal to Edward can be seen via the phrase “the only one [goal]”. Echoing Edward, Maria expressed her drive,

I have a strong motivation to graduate this year. Because of the tuition fee. […] In the first year I have done my study and my career plan simultaneously. But now I decided to make prioritization. The first thing is my academic and after that career. Now I am in the stage of graduation, completing my academic results. (Maria).
In her statement, it was clear that the tuition fee has a considerable impact on Maria’s goals of graduating on time (“this year”). This is due to the university’s policy that students cannot maintain their scholarship if they graduate after their second year. As a result, she decided to temporarily skip the career planning, which is a popular action of mastery goals, and prioritize the “academic results”, which is apparently a sign of performance goals. The same orientation was noticed in Emily when she talked about the pressure of time and the requirement of a Master’s thesis. To specify, Emily felt that everything was “set in the specific time periods” which led to the fact that she “had to complete this programme and all the courses”. Especially, she was worried about the Master’s thesis which is different to what she has been doing during the programme, due to the fact that it is a long individual project that she cannot collaborate with peers like in other courses. “It is somewhat challenging in that sense”, Emily concerned.

Unlike Maria and Emily, Edward, in the last phase of his studies, remained to be oriented strongly by his future career, which shows a mastery-driven orientation in goal-setting. He seemed to not be nervous about how the programme expects him to perform at this departure stage, but rather focused on what he can utilize from the experience to benefit his career.

Edward said,

Now [in year two], as the academic year has progressed, I have moved from writing the actual thesis into writing a journal article. And I am going to try that in my work. I am trying to utilize it in that way. [...] And my work definitely influences that. [...] I want to do a good job with my thesis to make sure that whatever I have written is useful for my future career. (Edward).

In sum, content analysis reveals that students in first year (during the ERL) set both mastery goals and performance goals, but tended to pay more attention to their mastery ambitions. After the ERL, there was a tendency for students’ goals to be shifted towards performance goals, due to the graduation pressure, while we are still able to witness several maintains of strong mastery orientation such as the case of Edward.
6.3. How did the ERL situation influence students’ goals?

Desiring to know whether there is any relation between ERL situation and the tendency of setting goals, I analyze the coding cluster of “Reason for changes”. Accordingly, eight categories are formed regarding factors that caused changes in students’ goals after the ERL. They are: (1) Graduation pressure, (2) Peers influence, (3) Familiarity with the programme, (4) Improvement in knowledge and skills, (5) Changing living location, (6) Changing interest, (7) External jobs influence and (8) Mental health issues. The distribution of these factors are as the Table 8 shows:

Table 8.

Factors influenced goals changes in Year 2

<table>
<thead>
<tr>
<th>Factor</th>
<th>Students mentioned</th>
<th>Coded references</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Graduation pressure</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2) Peers influence</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3) Familiarity with the programme</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>4) Improvement in knowledge and skills</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>5) Changing living location</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>6) Changing interest</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7) External jobs influence</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>8) Mental health issues</td>
<td>2</td>
<td>6</td>
</tr>
</tbody>
</table>

From clues in the factors names as well as the detail of interview statements, I conclude that there are 3 out of 8 factors that are related to the situation of ERL. They are peer influence (factor 2), changing living location (factor 5) and mental health issues (factor 8). The other 5 factors are not clearly relevant to ERL.
In the following sub-sections, I will start with irrelevant factors then delve deeper into relevant factors, with the aim to clarify the extent of influence that ERL has on students’ changes of goals from Year 1 to Year 2.

6.3.1. Analyzing irrelevant factors

Irrelevant factors include factor 1, 3, 4, 6 and 7. They are irrelevant for some reasons. Evidently, from year two of a two-year Master’s programme, students will have graduation pressure (factor 1) and shift their goals based on that. Therefore, this factor is not directly connected to the ERL context. Furthermore, it is also reasonable that students will get familiar with the programme (factor 3) as well as improve their knowledge and skills over time (factor 4) and as a result, some of their goals will fade out because they are no longer appropriate. Similarly, it is natural that one’s interest will change over time (factor 6) as well as being impacted by external jobs which are not parts of the studies (factor 7). The latter factor is indeed very decisive because it is related to one’s financial condition. In general, not all changes in terms of goals after ERL are related to the situation of ERL. This fact is shown clearly in students’ statements (sorted by factor, indicators in bold):

**Factor 1: Graduation pressure**

In the first year, in general, I realized that I need to just pass the courses. But now I have more specific goals, such as just complete my Master’s thesis. (Maria).

**Factor 3: Familiarity with the programme**

During the second year, I did not feel much pressured when it comes to achieving good grades comparing to my first year. Eventually I feel like I got used to the culture and the rhythm of the program. It helped me in not having a great deal of pressure when it comes to achieving academic goals. I did not take it very strictly, but I let it happen naturally. (Emily).

In the second year, you do not have to set explicit goals, but you already have these goals in your head or you have an understanding on how to manage things. Also, because you are still in the same program, you do not have to put in extra efforts to manage the program because you know what it is, how to deal with it and you just regulate what is important. (Tom).

**Factor 4: Improvement in knowledge and skills**

The more I know, the more experiences I have and also the internship I did really helped me to narrow down what kind of future career I want. Also, the more
**terminology I learned**, the more I am able to explore because you cannot explore career opportunities without knowing what they are like. (Tom).

**Factor 6: Changing interest**

There were **personal changes** such as changes in how I wanted to apply what I learned. **My interests just naturally changed.** (Anne).

How my studies and **area of interest has changed** influenced my decisions more than the goals that I did or did not accomplish. (Edward).

**Factor 7: External jobs influence**

**My work definitely influences that [goals].** (Edward).

By analyzing these comments, I can decide whether goal changes were related to the ERL or not. To this group of students, to a very large extent, ERL has nothing to do with changes that happened in their vision. It can be summarized that goal change in life and in studies is common and spontaneous. More theories in terms of this phenomenon will be given in the discussion section.

**6.3.2. Analyzing relevant factors**

More importantly, let us focus on factors that are likely to be relevant to the milieu of ERL which are factor 2, 5 and 8. Regarding peer influence (factor 2), Emily stated,

Interviewer: How your peers and cohort influenced your second year goals?

Emily: It's basically peer pressure, you know. You tend to observe someone else's actions and how they achieve certain tasks, certain goals in their own learning. And then you look at them and then you try to learn some tips and strategies from them.

Interviewer: I feel the peer pressure you mentioned is more of positive pressure.

Emily: Yes, positive pressure of course.

In her statement, Emily made it clear that a part of her goal-setting was regulated by positive inspirations from peers. Observing them gave her useful “tips and strategies”. It is noteworthy that Emily is the case that voted 0% (*Never*) for all categories of social interaction frequency in year one due to the fact that she could not be in Finland until the end of her first year because of resident permit difficulties caused by COVID-19. In year two, Emily reported significantly higher frequency levels in all categories. For meeting peers, she
particularly rated a frequency of 50% (Sometimes). It can be read from data that Emily did not have any face-to-face interaction with her cohort during the fully remote first year, and it was likely to hinder her chances to learn from peers, which is an important strategy of hers as stated. This is an example of how ERL challenged students of 2020.

Similar to Emily, Anne spent the entire first year in her home country learning remotely. At the beginning of year two, she relocated in Finland. In the interview, she straightforwardly indicated that this relocation was an influential factor for the changes in her goals from year two.

Interviewer: Is that [this change] related to the fact that you have changed where you want to locate at after graduation?
Anne: Yeah, I do not really have a desire to go back to my home country and participate in their education system. Being away from it allowed me to look at it differently and allowed me to see it a bit more clearly and I just do not want to be a part of it.

Anne made a very insightful point about how experiences out of the home country can impact one’s vision and desire. Studying abroad, being immersed in a different culture, disengaging from the previous environment gave Anne a better condition for reflection and as a result, she could see more clearly where and what she wants to (not) get involved in in the future. It can be implied that the ERL circumstance did have an impact in terms of postponing Anne’s opportunity to see her future more clearly as soon as the first year started.

Last but not least, 2 out of 8 students stated that there were wellbeing difficulties during ERL that influenced the changes in their second year goals. For example, Rose shared that she had made a change regarding time for main milestones in her Master’s because she did not want to “risk [her] mental health” while having to deal with numerous obstacles especially the job seeking and the Master’s thesis without proper support from the university as she wish to have. She later repeated that “[her] mental health is maybe the biggest reason for the changes”. Slightly different to this, Gabriel stated in more detail that the root of his changes
was the unsatisfaction when experiencing online learning, and that had helped him to “adjust [his] expectations”. More insights regarding students’ challenges during the ERL will be explored in the following section.

6.4. What were challenges students confronted when regulating goals during ERL?

It is important to note that although both relating to disadvantages of the ERL, RQ3 and RQ2 are different because the former queries for hindrances to goal setting during ERL and the latter sought to examine the influential factors to goals changes after ERL. Moreover, answering RQ2 is more about an interpretation from reasons of goal changes, while in RQ3, interviewer directly addressed the issue of ERL challenges. Without this clarification, RQ2 and RQ3 would be misunderstood to overlap each other when they do not.

Accordingly, the following question were asked in order to seek answers for RQ3: “What were main challenges you faced when setting goals during your first year?”. The question evoked students’ memory about an unusual period of time as well as queried for their own evaluation about the circumstance of ERL. The answers were later coded and categorized into 5 main clusters and 2 extra clusters which emerged when I read and coded the interviews. Tables below shows definitions of challenge types as well as number of references included in each cluster.

Table 9.

Definitions of challenge types

<table>
<thead>
<tr>
<th>Challenge type</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Environmental challenges</strong></td>
<td>Students lack of suitable learning environment, facilities and technologies needed.</td>
</tr>
<tr>
<td><strong>Instructional challenges</strong></td>
<td>Students lack of necessary instruction, guidance and feedback.</td>
</tr>
<tr>
<td><strong>Social interactive challenges</strong></td>
<td>Students lack of interaction with peers and teachers and the society.</td>
</tr>
</tbody>
</table>
Emotional and motivational challenges: Students have difficult emotional experience such as disappointment, discouragement, stress, depression, etc.

Strategic challenges: Students lack of knowledge and skills for setting goals.

Uncertainty: Students cannot see enough about their future to set goals based on that.

Advantages over challenges: Student found advantages from the pandemic situation.

Table 10.

Challenges confronted during the ERL

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Students mentioned</th>
<th>Coded references</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Environmental challenges</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>(2) Instructional challenges</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>(3) Social interactive challenges</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>(4) Emotional and motivational challenges</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>(5) Strategic challenges</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>(6) Uncertainty</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>(7) Advantages over challenges</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Results reveal that students most agreed types of challenges are (1) instructional challenges (4 students mentioned, 8 coded references) and (5) emotional and motivational challenges (5 students mentioned, 6 coded references). Although emotional and motivational challenges appeared in a slightly higher number of interview files compared to instructional challenges, the latter were mentioned with the significantly larger text coverage. Strategic challenges follow next with 4 references mentioned by 4 students. Social interactive challenges and environmental challenges are among the challenges that were implied less than the other three. Notably, there is one student named the uncertainty as a hinderance for him and another student claimed that actually the ERL was much easier and more comfortable for him. Those two emerging clusters were named (6) Uncertainty and (7) Advantages over
challenges. The following part sought to explore deeper each cluster according to the influential level sequence.

6.4.1. Instructional challenges

Instructional challenges refer to obstacles caused by a lack of instruction, guidance and feedback in students learning. In this study, data reveals that instructional challenges is among the most popular hindrances of goal-setting. For instance, Tom had made a rational point about the need of knowing “what direction to go”:

At least in my experience, most of the time the problem is just not knowing what to do, what direction to go. [...] Being able to know what direction or what information you need is the crucial aspect of today's world and that's what self-regulation and collaborative learning aims to achieve: helping an individual to be able to know what knowledge they need to gain by setting goals, by regulating themselves, by reflecting and renewing their goals. However, I mean in a structured environment you need to be told what you need to do. And it just becomes frustrating. (Tom).

In his statement, Tom was deeply aware of the importance of self-regulation as well as how to regulate his learning by pointing out phases such as setting goals, regulating, reflecting and renewing goals. However, in his opinion, learners need to be facilitated with necessary guidance to be able to successfully self-regulate their learning. Especially in a structured programme, to some extent, students need to be told what to do. As a result, Tom’s experience during ERL was not satisfactory (“frustrating”) due to the lack of adequate support.

In another case, Rose was among the most vehement respondents when talking about instructional obstacles. She shared,

I do think that, maybe there are things that could be changed or could have been paid more attention on from the university or from supervisors or just to take into account that we have had a lot more difficult. [...] I think sometimes there could not be [more] chances especially for us international students who did not even just face the corona situation but also faced being in the new environment, being dependent on so many factors. [...] I have just had to figure out so many times things that are not possible. This thesis could have been supported more because in the end, we have to get out of it, we have to do that in order to graduate. That could be more supported. (Rose).
Thesis is a big deal for any Master’s student. Rose was not an exception. Spreading a call for more help from the university for students of 2020, Rose pointed out one of the biggest obstacles for Master’s student to do a thesis is the chances to observe and collect data which became harder than ever during the pandemic. Consequently, the situation put students of 2020 at risk because their pressure to graduation is still the same compared to normal students. Being contributive, Rose suggested some ways to help that the university could consider. For example,

[...]. My suggestion is that there would be some projects that are already ongoing and they will open up for Master’s students so you can work within a project, get some of your data and you have also contributed to the project. (Rose).

In a more intense degree of emotion, Gabriel assumed that one of the biggest challenges was the fact that he did not receive proper feedback at the beginning of the studies, when students were asked to make a personal study plan (PSP).

Interviewer: What were the challenges you faced when setting goals then [first year]?

Gabriel: It was the combination of, on the one hand, lack of specific goal-setting from my part and on the other hand, [...] lack of feedback especially with the personal study plan that we did. I think it contributes to lack of goal setting during and after the initial failure.

It is noteworthy in Gabriel’s statement that he mentioned the “initial failure”. It is yet clear what failure he was referring to but for Gabriel, the starting point was likely to be significant. If we begin our learning with a success or good impression, for example, in this case, a thorough comment on the PSP, then we would be more motivated to set better goals and to succeed. Especially in the context of ERL, feedback is more needed than ever to make students feel they are cared for.

6.4.2. Emotional and motivational challenges

Emotional and motivational challenges are not necessarily separated from other types of challenge. In contrast, in many cases, they are subsequent affects. During the interviews, I
noticed a great number of times when students expressed their tough feelings during the ERL.

For Anne, the emotional experience was heavily impactful to her goals. She shared,

I became very demotivated. So I would say, my academic goals were definitely negatively impacted by the fact that it was very unmotivated from the disappointment. [...] I just was really disappointed with my first year [...] All those goals just disappeared. (Anne).

Anne showed us how being disappointed and demotivated could seriously hamper goal-setting. Specifically, it could destroy goals totally (“disappeared”). To recall, “those goals” refers to Anne’s very ambitious performance goals (being a high scoring students) and meaningful mastery goals (learning about technology-enhanced learning and self-regulated learning) that we have read in the previous section of this thesis. Personally, I think what happened with Anne was regretful and as educators, it should be the last experience we want to bring to our students.

Emotional difficulties were there, not only via verbal shares, but also physically evident. Tom witnessed some signs in his body when he get stressed. He told,

When I get stressed, I have this skin, over here [showing his elbow] it gets very dry. I mean, right now it’s better because I feel better. But before, this was all bleeding because it was like very dry and I kept on itching it. (Tom).

Coming back to Gabriel. When explaining in more detail about his feeling, Gabriel used strong words such as “disappointment” or “disillusionment” to recall what he went through. Another similar case is Rose, who stated that her mental health was an influential factor to her goals and that she had to contact the psychologist for help. She said,

In the winter, [things I have just shared] became altogether that I felt very highly stressed and it was dark and I’ve also been reached out for study psychologists. That’s all I got. I reached out for help and that has then also changed my goals. (Rose).

Rose has been studying in Finland, which is known as a country with a long winter. This seasonal characteristic is very likely to impact students to a considerable extent, given the fact that not all of them come from similar weathers. Moreover, the ERL was their first year,
when proper orientation and support should be available to foster the adaptation process, including adaptation to Nordic weather. Unfortunately, due to COVID-19, those expectations could not be meet when the priority is to keep safe for everyone so that we could have some hope about a near future without the virus. Such an uncertain circumstance had underestimated students’ essential need in terms of their wellbeing. In the case of Rose, carrying goals just made her feel more “frustrating” and she had decided to adjust her goals after she realized that “it's not so realistic, it's risking [her] mental health”.

6.4.3. Strategic challenges

During Autumn 2020 and Spring 2021, all participants in this study were in their first year. Those freshmen apt to lack some necessary knowledge and skills which could promote their goal-setting. Strategic challenges, referring to challenges caused by lacking relevant knowledge or skills, were identified as one of the most influential factors that interfere with students’ goal regulation. For example, Edward felt that the biggest challenge was his background knowledge. He shared,

As far as challenges go, the biggest one was probably that I did not have a background or a lot of experience in education. So there was a lot of extra readings that I had to do to try to catch up, to understand what is being talked about. Because most of you, even if you don't have formal education in education or teaching, you still have a certain level of knowledge on the topic. I did not have that. (Edward).

Before, Edward had shared that he came to the programme with a very different viewpoint, given his background was mostly about management. It is understandable that he felt more knowledge was needed to set effective goals at the beginning of his first year. Although stating this as a shortcoming, Edward did an excellent work in self-regulating his learning, since he was exactly doing the action of task analyzing and reviewing self-efficacy.

Similarly, Rose mentioned strategic challenges in her statement:

Interviewer: What were the challenges then [first year], in terms of setting goals?
Rose: What I found difficult especially at the beginning was to not really know how things are done in Finland and not really knowing the language and not really being clear about whom I could contact if I have struggles. (Rose).

Later in the interview, Rose said that she based mainly on what she was told about studying abroad when she was in her Bachelor. That contributed partly to her decision to Finland, and was the only “internal script” that she had in mind. She then soon realized that her reality was not the same as what she was told and it challenged her studies as well as goal-setting at the beginning of the programme.

Unlike others, Anne is an interesting case when stating a mixed feeling of disappointed and reflective. She said,

I think the difficulty is that my goals and my first year were not appropriate for the context. So they were not appropriate for what the Master’s programme actually was. I have visualized it to be something and hoped it would be something very different than when it was. And I based those goals on what I hoped it would be and not what it actually was. [...] That's really the difficulty in my goal setting. (Anne).

In this comment, I focus on Anne’s reflection on her own goal-setting. The problem was that she set goals based on hope, not on adequate researching on what her Master’s actually is. Of course, sometimes, knowing what something actually is is impossible, and in order to do that, we need to be provided with thorough orientation and chances to try and fail. However, one lesson that Anne had had for herself is to not based too much on own hope, but rather be realistic.

6.4.4. Social interactive challenges, Uncertainty, Environmental challenges and Advantages of ERL

It would be remiss to not mention social interactive challenges and environmental challenges. First, predictably, students of 2020 faced difficulties about lacking of opportunities to interact with peers, teachers and the society. Emily stated that “not being able to meet with your friends and also not being able to recognized by your teachers was […] challenging”, while Johan believed that “if we are learning in the same room and the teacher is also in the same
room, [...] it would be] much more motivated [...] with the organic responses”. In the case of Rose, as mentioned in previous section, she was wondering who she would contact when struggling and that was a hindering factor to her goals. She also shared,

I have not been aware how much harder it is in the COVID situation, I cannot really integrate into anything if I do not even see people, and do not even use the language other than with my spouse and his family. (Rose).

Starting the programme remotely also hampered the cohort’s networking. Rose remembered that her class had a WhatsApp group and it was very active at the beginning, but “has just become less active over the time”. The limitation in terms of social interaction also interfered with her thesis data collection, because she “could not visit anywhere and people were not willing that I would do my observation somewhere”. As a result, she had to make changes to her thesis plan not totally by will.

Likewise, Gabriel had to adjust the timetable he made before and moved to “survival mode” because there were too many things that he could not foresee,

Maybe it was related to how all the changes that happened during specially 2020 that it demotivated me or discouraged me from setting any goals in fear of those goals failing because of external circumstances. (Gabriel).

Here, we can observe that the action of setting goals are more or less decided by the evaluation of possibilities to achieve goals. If winning chances could not be foreseen to a certain degree, students tend to ignore setting proper goals.

In ERL, each student was in their own learning space, therefore, some difficulties that could not happen in a shared space can arouse in the ERL. For example, Emily encountered environmental and technological challenges when the internet in her home country was not stable. She said,

Mostly I faced a lot of technical issues. When I was opening the computer and it was flagging, then I realized that I would run out of Internet packages. Or sometimes there was rain and power cuts, and then I would not be able to join the course. This kind of
challenges really hindered my motivation. And it was difficult for me to carry out my studies with the same amount of excitement I had when I started the program. (Emily)

Johan shared the same situation with Emily when he spent his first semester in his home country. At that time, he has other personal work to do, and the major obstacle was about daily schedule,

In order to achieve the PASS, I have to study, right? And I have also to set daily goals. It was then affected by my work because my work influenced my daily plan sometimes. (Johan).

Time zone difference is another hindrance that was mentioned in Johan’s comment. He said,

Those meetings or group work is also a bit difficult to agree certain time with my peers, especially putting into consideration different time zones. (Johan).

Interestingly, there are also students who enjoyed the advantages of online learning, like in Edward’s case. He said,

It was actually easier for me because I was able to do both work and studies from home at the same time. Just doing one and then just moving on to the other thing. Of course it takes away some of the attention that you have […], but it was much more convenient for me than having to be on campus every day. (Edward).

This is in line with a growing body of research revealing plenty of advantages when studying online, including the multi-tasking possibility that Edward had shared.

6.5. What strategies did students use to regulate goals during the ERL?

In order to answer research question 4, I asked students the question: “How did you overcome those challenges?” or/and the question: “Do you have any tips or strategies to share?”.

After reading through the comments, I generated a new code system to categorize students’ tips and strategies in terms of goal-setting in the situation of ERL. As a result, I found 8 main strategies which are defined in the tables below:
Table 11.

Definition of goal-setting strategies

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicate</td>
<td>Talk with peers, teachers or other people to seek help.</td>
</tr>
<tr>
<td>Shift the motivation source</td>
<td>Find another source of goal to feel motivated again.</td>
</tr>
<tr>
<td>Relax and be flexible</td>
<td>Do not set too strict and unchangeable goals.</td>
</tr>
<tr>
<td>Journaling</td>
<td>Visualize thoughts by writing them down.</td>
</tr>
<tr>
<td>Set proximal goals</td>
<td>Set short-term goals.</td>
</tr>
<tr>
<td>Chunking</td>
<td>Divide goals into smaller parts.</td>
</tr>
<tr>
<td>Find the strong WHY</td>
<td>Start with the question why you have to do this. If the WHY is strong enough, you are easier to achieve your goals.</td>
</tr>
<tr>
<td>Disengage</td>
<td>Stop paying attention to what causes difficulties.</td>
</tr>
</tbody>
</table>

Table 12.

Tips and strategies to overcome challenges during the ERL

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Students mentioned</th>
<th>Coded references</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Communicate</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>(2) Shift the motivation source</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>(3) Relax and be flexible</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(4) Journaling</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>(5) Set proximal goals</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>(6) Chunking</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>(7) Finding the strong WHY</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>(8) Disengage</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Using NVivo visualization tool, I created a chart to demonstrate the distribution of each strategy in the total population of participants (Figure 10). Due to the small size feature of the research, this chart does not indicate any pattern, yet shows us which tips and strategies are more likely to be shared by several students in the cluster and which ones are emphasized most frequently.
Figure 10.

*Distribution of tips and strategies in goal-setting during the ERL*

It can be seen that *Relax and be flexible, Set proximal goals* and *Shift motivation source* are among the most popular strategies shared in this population. *Find the strong WHY, Disengage* and *Journaling* follow with a similar number of references. Among those which are less mentioned are *Communicate* and *Chunking*. In the following part, I will give examples and analysis of each strategy.

6.5.1. Relax, be flexible and Communicate

Sometimes, take a break and come back with a new vision would help students to better set and regulate their goals, or even achieve the goals. That is what Maria believe in,

Interviewer: Do you have any tips or strategies to share?

Maria: […] Do not allow your obsession and concentrate on only one goal. If you go with one goal and it does not work, you cannot achieve it [at that moment]. Just switch your trajectory a little bit. Or just leave it there for some time and do another thing and come back again with new vision.
Maria further explained that this tip was drawing from one of her authentic experiences when she witnessed a goal became true after a summer break, even when just before the summer, she felt that she might need to surrender. Maria was true that, sometimes, being too ambitious or concentrating creates pressure which can hinder our ability to see things clearly and set appropriate strategies. In an uncertain situation as ERL, it could be good to keep in mind this tip to not risk our mental health. This mindset was shared by Rose. Rose had learned a lesson about relaxing and prioritizing her wellbeing when pursuing certain goals in studies. She said,

*I wish I would have been a better friend for myself, kinder to myself. And acknowledge that, OK, this situation is hard and it is not just me taking the wrong steps.* (Rose).

To a more specific extent, Emily echoed this with her findings,

*One thing I want to tell is sometimes I do not set my goals explicitly, meaning that I do not have a plan for every day and every week, but that was all in my mind. [...] I do not explicitly set my goals or have it printed or written down somewhere. You are not always visualizing it. And it could be beneficial somehow.* (Emily)

Either in mindset or in practices, flexibility is needed for goal-setting in uncertain situations.

At the same time, trying to reach out to friends and professionals is also a useful tip, as Emily shared,

*One strategy was having conversations with you peers whenever it was needed. So if there was any confusion, if I missed a class, I would ask someone from the class about what happened during the day about what happened at the course. So I will be able to catch up with those work.* (Emily)

By communication and negotiation, students co-regulate their learning and thus are able to achieve the joint goals. They are usually among best self-regulatory tips in harsh situations. However, communication was not shared as a tip by many students within this research, given the fact that in Year 1, almost students did not know each other and did not have any better get-to-know interaction than virtual meetings. This hindered students’ motivation and desire to communicate.
6.5.2. *Set proximal goals, Chunking and Journaling*

Students also gave advice about shortening the timeframe of goals. They learned from their mistakes of setting too far goals, which sometimes ended up with struggling. Address this pattern, Anne said,

> Instead of thinking so long term with my goals because it was more general just for the entirety of the two years of the Master’s, I started to make them more proximal. [...] Do not make them so far ahead. [...] Making them [goals] on a shorter timeline would be my biggest tip, especially for first year, then maybe your goals are not so at risk of being negatively influenced. (Anne).

Emily agreed with this tip when she emphasized,

> I always set very, very short term goals. For example, I set a goal on Monday to finish the language assignments by Friday. So that was achievable and that was very time-bound in a way. Having these short term goals, even for the smallest thing you have in your agenda can help you to overcome the challenges you face in academic settings. (Emily).

Relatedly, it is widely agreed that chunking or breaking goals into smaller sub-goals is another effective tool, not only during the ERL but also in learning and working in general. In terms of the motivational and emotional aspects, it generates the feeling of achievement which is beneficial for maintaining learning inspiration even in hardest time. *Chunking* was also Johan’s favorite approach. He shared,

> For me, the strategy that works best is chunk. For example in one project I had to make a portfolio, it was so demotivating if I thought of doing all of them in one day. So what I do is I was doing it little by little, maybe one page per day. It motivated because I know that in one day I can just do a small thing but when put together, it was going to be complete. So chunking is the best strategy that works for me. (Johan).

Another practical tip is to write down the journey with the purpose to visualize it and organize inside thoughts. It was proved to be effective for Emily,

> I started writing during my first year, I have a book or an outlook where I jotted down the things I have to do during the day or during the week, by that way I am able to look at those task and achieve it accordingly. [...] Whenever it is too much to handle in my mind, I try to write them down and list them down so I get the work done one by one. (Emily).
6.5.3. Disengage, Shift motivation source and Find the strong WHY

These clusters are avoidance-oriented. Students tend to regulate their goals by firstly to stop being connected with things that they felt hard to achieve or caused too many difficulties. It was Gabriel’s case when he expressed that he had adapted a type of “emotionally disengage”. He stated,

Slowly unnoticeably, the self defense mechanism kicked in and I am just moving to survival mode. So I overcame the challenge by not caring as much. (Gabriel).

Similarly, Edward shared,

When motivation sinks, I am just mentally disconnected from it, I do the minimum required amount just to get through it. (Edward).

In the ERL context, we did not have too many clues about the future, the chances to communicate were also limited. It is reasonable that students loosed their strong connection with the studies, create a safe zone, also known as “survival mode” (Gabriel), by doing “the minimum required amount” (Edward) and try to get through the tough time. To many of them, the next step would be finding another source of motivation which was not entirely related to the studies. For example, Edward oriented all of his studies toward his external job, while Anne started her internship hunting and tried to gain a sense of accomplishment by getting a good internship.

So in the first year when I started to become really demotivated with my academic goals, I started to increase motivation by wanting to get a really good internship, I wanted to get good grades again to get an internship. […] Then I became invested [again] in it [the programme]. (Anne).

The working life relevance aspect of the programme gave Anne some hope amidst the negative feelings. Gaining a working experience could somehow satisfy the performance goals she had set from the beginning of the programme. Echoing Anne, Gabriel applied the same strategy but at the end of his studies. He said,

I am kind of slowly through endless hours of job seeking and applications. Literally. I definitely send more than 100 applications at this point. Definitely trust me, I am
really working hard. [...] I think it is good for my attitude of being open to opportunities in life and perhaps just moving away from this idea of me in a more creative role. [...] Now I am setting a new goal because finding a better job is more important [to me]. (Gabriel).

It is noteworthy to see from data how job and working are important to students. In the circumstance of the pandemic, after several years limiting activities and staying home a lot, not to mention the instable situation of many people in terms of their employability, having a job might give a sense of contributing, belonging and being financial stable. This working relevance can be considered a part of the “strong WHY” that I realized when listening to interviewee. I noticed and assumed that students who chose to stay, to continue and not give up must have had very special reasons. Maria is an example. She said,

I may say that goal setting begins when you face some confrontational problems. If you have some problems, now it is your task and you try to do it somehow. That is why you have a strong goal. But when you do not have any problems or they have like a small influence on you, your goal setting is not so strong as well. (Maria).

It is an interesting share about motivation to keep following goals and turn goals to action. Sometimes, those motivations are more or less negative (“confrontational problems”), but at the end, they turn out to be a source of stimulation for us to drive to the positive side of them.

In this part, I have just shared what students applied and believed to be effective when coping with ERL, when it became hard to see clearly the future. From a personal viewpoint, I agree with these to a great degree. Investigating to research on the topic of goal-setting strategies, we can also surely find similar experiences were shared and proved to be beneficial. More importantly, finding appropriate strategies has been a strong evidence for students’ effort and resilience during the pandemic.

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2 Sensitive information excluded.
7. Discussions and conclusion

In summary, drawing on qualitative data and a small set of quantitative data, the study depicts a comprehensive and nuanced analysis of students’ goal-setting during the emergency remote learning (ERL). Various findings were particularly noteworthy and interesting in the study.

First, combining the numeric data and participants’ further share, it is shown that ERL is not only emergency and temporary as defined, but also persistent, meaning it lasts for a long time. For me, this is the most notable information from the quantitative data set. It elaborates the time nature of the ERL during the COVID-19 pandemic. While other situations of the emergency remote learning and school closure could be temporary and the face-to-face learning could be brought back soon, for example in the war (Emma Batha, 2022), or the strike (Yle News, 2022), COVID-19 pandemic is much more complicated. COVID-19 is a new virus, developing a new vaccine from scratch takes considerable time (Matt Shipman, 2020). We hoped that the virus would disappear as soon as possible but in this fight, human are not in the proactive role. The long waiting time reveals the uncertain nature of the future and increase the level of stress in people to the highest. This is contradictory with my assumption when starting this study that, in Year 2, there would be a significant change in the amount of online learning time, the level of social interaction, thus a considerable and positive change in students’ goal-setting and learning effectiveness. The fact that ERL during COVID-19 is very persistent explains the avoidance orientation found in students when coping with it. As a result, my finding can enhance the current construct of ERL definition to a more solid degree (the elaboration is colored red in Figure 11).
Second, data reveals the tendency to set more performance goals in Year 2 compared to Year 1. Although several influential factors are found to be related to the situation of ERL, such as the increase in social interactive level, or the chances to go to university, this tendency is more associated with the characteristic of the two-year Master’s programme, when students faced more pressure in Year 2, as well as the changing nature of human interest. This is in line with the fact that “the moderate stability of life goals during college was not so high as to prohibit change” (Hill et al., 2011), but at the same time, increased difficulties would make it hard to pursue the accuracy goal, which leads to continuously changing goals (Castro et al., 2021). Put differently, goals change is a normal phenomenon in life, especially in young people, but the ERL could contribute to the change to some extent due to the advantages and disadvantages it brought to students.
Third, the instructional challenges and emotional and motivational challenges are observed at a high extent, raising concern about students’ satisfaction and wellbeing during and after the ERL. This result is in line with the framework of ERL core elements, where authors emphasize the first and foremost challenge of learning design. Furthermore, there are numerous studies on students’ mental health and emotional experiences during the ERL showing the same findings (Irembere & Lubani, 2020; Rahiem, 2021; Son et al., 2020; Tarteer et al., 2022; Terävä et al., 2020; Tulaskar & Turunen, 2021). Despite the fact that students of 2020 have graduated or will soon graduate, successfully or not, satisfactorily or not, this finding still places certain requirements on the work of instructors and learning designers on how to facilitate better the ERL, if there are similar crises happening in the future. Attention needs to be paid to the three aspects of ERL that was illustrated in Hodges et al. (2020)’s model, which are the pedagogical design, the timeframe and the support system. Drawing on this, teachers can design better learning experiences for students so that they will not be over-struggling by the lack of any in those three aspects. For example, proposers of ERL have suggested the use of CIPP model to evaluate online learning before, during and after implementation (CIPP stand for context, inputs, process, and products). Table 13 demonstrates evaluation instruction.

Table 13.

*CIPP model terms and instruction for ERL design (adapted from Daniel & Guili, 2017 and Hodges et al., 2020)*
More suggestions could be found in a growing body of research on pedagogical method in ERL, for example Almutairi et al. (2021)’s proposal of a novel framework for facilitating ERL during the COVID-19 pandemic. Of course, not all the time all expectations could be meet, especially in an emergency crisis that we all have never had internal script before. In this case, it matters what lesson we learn from these recent years.

Forth, I am highly interested in strategies and tips to overcome challenges in goal-setting that students shared. Even in approaches that are more or less avoidance-oriented such as relax and be flexible, shift the motivation source, disengage, we can still learn from students’ resilience to maintain their studies and self-motivate themselves. In other cases, tips about chunking, setting proximal goals or journaling are reasonable and proved to be effective throughout authentic experiences of students of 2020. It is also noteworthy that students who are still be in the cohort of 2020, in my opinion, are those who have a very strong WHY inside their mind, as stated in the interviews. Without that strong WHY, students would be easy to give up when confronting difficulties and demotivation. This is the point that goal-setting is included in or intersects with research on motivation within the scope of SRL as
being discussed for decades in social sciences (Erez & Judge, 2001a, 2001b; Lunenburg, 2011; Manderlink & Harackiewicz, 1984; Sides & Cuevas, 2020).

8. Limitations and suggestions for future research

Since the study asked participants questions that require them to recall their memories, especially those were in Autumn 2020, which is nearly two year ago up to the interview time, deviation could happen due to memory capacity, students’ current perceptions and beliefs as well as their reflection. Moreover, given the fact that a considerable proportion of participants is from the same cohort with me, peer pressure might affect the comfort to answer and share goals. Not all the time we are willing and comfortable to share our goals out loud to others, particularly when those goals are still novel and changeable. In addition, within scope of the current study, I only examine academic goals and career goals, focusing more on the former. Therefore, I might miss other important clusters of goals such as language learning, cultural exploration travel, tourism or personal escape (Haisley et al., 2021), world enlightenment and entertainment (Anderson et al., 2015), which are highly relevant and meaningful to the group of international students.

Furthermore, I still have an extent of unsatisfaction concerning the demographic of participants in this thesis. Initially, I sought to hear more from international students who come from non-European areas, non-native speakers country, for whom studying abroad is, in many case, an one-in-a-lifetime event. Examples are students from Asian countries or African countries. I wanted to listen to the way they cope with the situation of not being able to fly to the host country at the beginning of their studies, not having opportunities to get immersed into the language which is one of the most important goal witnessed in this group of students (Haisley et al., 2021). However, to my interpretation, students who confronted an over level of challenges, for some reasons, might not be here anymore and chose other alternatives to continue their academic goals and ambitions (more persuasive claim could be
found by research on students’ retention during the pandemic, for example one from Swani et al., 2021). This shortcoming could be fixed if I have opportunities to expand the size of my sample. It is, hopefully, a suggestion for those who are interested in the same topic with me.

Last but not least, although a significant amount of comment stated their difficulties caused by an ill-designed instructional system, it is meaningful to hear the instructors’ side of story as well, focusing on how they facilitating students’ goal-setting. Because when the pandemic hit, they were the ones who firstly received the responsibilities to cope with the situation and were pushed to prepare the delivery mode solutions within days (Hodges et al., 2020), despite the fact that they could have been facing more or less similar difficulties and obstacles in their work as well as wellbeing. Thus, emergency remote learning is usually known under the alternative term of emergency remote teaching. The hurried manner of time, elaborated with a robust increase in reactions, feedbacks, help requests, etc. from students had surely caused stress and struggling to instructors/teachers/professors as well.

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Appendix 1

Interview protocol

Greeting and introduction

I am Ha Pham from the Master’s Degree of Learning, Education and Technology, Faculty of Education, University of Oulu.

The topic of my study is: Navigating Toward an Uncertain Future: How Students Regulated Goals During the Emergency Remote Learning. I research about how students set and regulated their goals during the COVID-19 pandemic.

This interview is for students of 2020, who started their study online. Data from the interview is used only for my thesis and will be kept safe as detail in the consent form. You are free to choose to answer either in a general or detailed manner. Thank you for giving me the consent as well as for your agreement to participate.

Demographic information

Can I have information about your program, your university, years of studies, and country you come from?

Goals before studies

Why did you choose your program?

First year situation

Please evaluate the amount/frequency of online learning time during your first year (1=Never, 2=Rarely, 3=Occasionally, 4=A moderate amount, 5=A great deal, 6=100%).

At the beginning of first year, did you face any challenge when deciding to come to Finland or not?

Please evaluate your chances to meet your cohort, meet your teachers, enter the campus and explore the country/city during your first year (1=Never, 2=Rarely, 3=Sometimes, 4=Ofen).

First year goals

What goals did you set for yourself at the beginning of your first year? (in terms of academic results and future career).
What were factors that influenced your first year goals? How do you evaluate your first year goals?

**Challenges in ERL and how to overcome those**

What were the main challenges you confronted during the first year, in terms of setting goals? How did you overcome those challenges? Is there any tips and strategies you want to share for other learners?

**Second year situation**

Please evaluate the amount/frequency of online learning time during your second year (1=Never, 2=Rarely, 3=Occasionally, 4=A moderate amount, 5=A great deal, 6=100%). Please evaluate your chances to meet your cohort, meet your teachers, enter the campus and explore the country/city during your second year (1=Never, 2=Rarely, 3=Sometimes, 4=Often).

**Second year goals**

What were main changes in your second year goals compared to those of first year? What were reasons for the changes? What were factors that influenced your second year goals? How do you evaluate your second year goals?

**Final evaluation**

How did your goals help you in your studies? Do you wish to come back and change any goal of your first year? If yes, why, and how would you change them?
Appendix 2

Interview invitation

**INVITATION TO INTERVIEW**

2020

**WHO IS ALICE & WHAT IS SHE DOING?**

I am Alice (Ha Pham) from Vietnam. I am from the Master’s programme of Learning, Education and Technology, University of Oulu.

I am conducting my thesis focusing on how international students set their goals in the situation of emergency remote learning at the starting point of the academic year 2020-2021. I target students of 2020 like me.

In order to understand this group of learners in terms of their goals setting strategies, I need to organize 10 interviews to collect data. It would be a pleasure for me to have your participation!

**HOW DOES THE INTERVIEW LOOK LIKE?**

My interview combines qualitative and quantitative approaches. In the quantitative part, we will have a very logical structure to follow with multiple choice questions and clear Likert scales. In the qualitative part, you will have a lot of flexibility and comfort to choose whether to answer deeply or generally.

All data collected in the interview will be used only for my thesis and will always be anonymous. I will delete all data after my research and never use them anywhere else. More information of the consent will be shared during the interview.

The interview will take around 20-30 minutes. There is only one interviewer (me).

**How To Join?**

Please send me your email and preferred time via chat, via our mutual friend or by scanning this QR code. I will contact you very soon to start.

tinyurl.com/alice@oulu
## Appendix 3

### Coding rules and examples

<table>
<thead>
<tr>
<th>RQ</th>
<th>Name</th>
<th>Description</th>
<th>Example from text</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ1</td>
<td>Goals classification</td>
<td>Mastery goals: students aim to foster new skills and improve competence</td>
<td>I wanted to have more of societal view on education.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Performance goals: students aim to demonstrate competence, compete with others, gain public recognition or achieve obligatory requirements</td>
<td>I wanted to be a high scoring student.</td>
</tr>
<tr>
<td>RQ2</td>
<td>Reasons for changes</td>
<td>2nd year pressure: Pressure related to last year requirement and graduation</td>
<td>In second year, I am pushed for the thesis.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mental health: Students could not overcome challenges</td>
<td>My academic goals were definitely negatively impacted by the fact that I was very unmotivated from the disappointment.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Changing interest: Students’ interest changed naturally</td>
<td>My interests just naturally changed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Changing location: Students were effected by new living location</td>
<td>Being away from it (my home country) allowed me to look at it differently and it allowed me to see it a bit more clearly.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Peers influence: Students received inspiration or pressure from peers</td>
<td>You tend to observe someone else's actions and how they achieve certain goals in their own learning. And then you look at them and then you try to learn some tips and strategies from them.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Familiarity with the programme: Students get used to the programme and adjust their goals based on the ease they have now</td>
<td>I got used to the culture and the rhythm of the program, it helped me in not having a great deal of pressure to achieving this academic goals.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Better knowledge and skills: Students are better in their knowledge and skills and adjust their goals based on their current competencies</td>
<td>The more I know, the more experiences I have and also the internship I did really helped me to narrowed down what kind of future career I want.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>External jobs: Students have other jobs apart from the programme and it affects their study goals</td>
<td>My work definitely influences that [my goals].</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other challenges: Not above reasons</td>
<td></td>
</tr>
<tr>
<td>RQ3</td>
<td>Challenges</td>
<td>Advantages overcome challenges: student found advantages from the pandemic situation</td>
<td>It was easier for me because I was able to do both work and studies from home.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Emotional and motivational challenges: Students had difficult emotional experience such as disappointment, discouragement, stress, depression, etc.</td>
<td>I felt very highly stressed and it was dark.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Environmental challenges: Lack of suitable learning environment, facilities and technologies needed</td>
<td>I ran out of Internet packages and then I won't be able to join.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Instructional challenges: Lack of or ill instruction, guidance and feedback for goal setting</td>
<td>Most of the time the problem is just not knowing what to do, what direction to go.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Social interaction challenges: Lack of interaction with peers and teacher and the society</td>
<td>I cannot really integrate into anything if I don't even see people.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strategic challenges: Lack of knowledge and skills for setting goals.</td>
<td>My challenge was the lack of knowledge on the topic that we studied.</td>
</tr>
<tr>
<td>RQ4</td>
<td>Tips and strategies</td>
<td><strong>Communicate</strong></td>
<td>One strategy was having conversations with you peers whenever it's needed.</td>
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<tr>
<td></td>
<td><strong>Shift the motive source</strong></td>
<td>Find another source of goal to feel motivated again</td>
<td>I started to increase motivation by wanting to get a really good internship</td>
</tr>
<tr>
<td></td>
<td><strong>Relax and be flexible</strong></td>
<td>Do not set too strict and unchangeable goals.</td>
<td>Sometimes I do not set my goals explicitly.</td>
</tr>
<tr>
<td></td>
<td><strong>Journaling</strong></td>
<td>Visualize thoughts by writing them down.</td>
<td>Whenever it's too much to handle in my mind, I try to write them down.</td>
</tr>
<tr>
<td></td>
<td><strong>Set proximal goals</strong></td>
<td>Set short-term goals.</td>
<td>I always set very, very short term goals</td>
</tr>
<tr>
<td></td>
<td><strong>Chunking</strong></td>
<td>Divide goals into smaller parts.</td>
<td>I think for me, the strategy that works best is chunk.</td>
</tr>
<tr>
<td></td>
<td><strong>Disengage</strong></td>
<td>Stop pursuing what causes difficulties.</td>
<td>I overcome the challenge by not caring as much.</td>
</tr>
<tr>
<td></td>
<td><strong>Find the strong WHY</strong></td>
<td>Start with the question why you have to do this. If the WHY is strong enough, you are easier to achieve your goals.</td>
<td>If you have some problems, now it's your task and you try today somehow. That's why you have a strong goals.</td>
</tr>
</tbody>
</table>
Appendix 4

The consent form

Information for Research Participants

You are taking part in a scientific study organized by the University of Oulu. This notice describes how your personal data will be processed in the study.

Participation in the study is voluntary. There will be no negative consequences for you if you choose not to participate in the study or if you withdraw from the study.

For more information on your rights and how you can affect the processing of your personal data, please see section 17 of this notice.

1. Data Controller

University of Oulu
Address: PL 8000 90014 Oulun yliopisto (Pentti Kaiteran katu 1, Linnanmaa)

Contact person in matters concerning the project:

Name: Ha Pham Thi Ngoc
Address: Kajaanintie 34 C28
Tel.: 0418113014
E-mail: ngochapham.edu@gmail.com

Name: Essi Vuopala
Address: Pentti Kaiteran katu 1, Linnanmaa
Tel: 0294483666
E-mail: essi.vuopala@oulu.fi

2. Description of the study and the purposes of processing personal data

This research investigates how international students navigate their learning during the COVID-19 pandemic, focusing on goal-setting phase. It examines how different the goal-setting strategies of students are in different situations, specifically during and after one year of 100% remote learning
(2020-2021). It also studies what kind of factors influencing the goal-setting of students during the special period of time.

For that research aim, I need to collect data from your sharing about:
- What goals you set,
- What factors influenced those goals,
- How it changed when you moved from 100% online learning to hybrid/contact learning,
- And how you evaluate your goal-setting strategies.

I will use your sharing to realise the relation between goal-setting and different learning circumstances. This also clarifies the impact of the emergency remote learning period to students’ life.

In the interviews, participants are encouraged to choose how detailed they can share their stories. Either general or detailed answer is appreciated. Participants are absolutely respected if they refused to answer certain questions.

In the data analysis process, I will exclude all these types of information:
- Name
- Home country
- Political opinions
- Mental issues
- Physical issues and diseases
- Financial status
- Academic result
- Resident status
- Expected graduation time

3. Parties and their responsibilities in research collaboration

The people listed in section 1 of this notice are joint controllers in this study, meaning that they jointly determine the purposes and means of processing personal data.

Participants may make all requests concerning the rights of the data subject to the following contact person:

Name: Ha Pham Thi Ngoc
Address: Kajaanintie 34 C28
Tel.: 0418113014
E-mail: ngochapham.edu@gmail.com

When necessary, the contact person will communicate the request to the other organizations acting as joint controllers.

The participant may exercise their rights under the General Data Protection Regulation in respect of and against each of the controllers. In this case, the recipient may communicate the request or claim to other joint controllers when necessary.
4. Contact details of the Data Protection Officer

You can contact the Data Protection Officer of the University at dpo@oulu.fi.

5. Persons processing personal data in the study

Ha Pham Thi Ngoc

6. Name, nature and duration of the study


☑️ One-time research

Duration of the study: from 01.04.2022 to 19.05.2022.

7. Lawful basis of processing

Personal data is processed on the following basis, which is based on Article 6(1) of the General Data Protection Regulation:

☑️ participant’s consent

8. Personal data included in the research materials

University, programme, year of study, city of living in Finland.
Previous study/career.

9. Sensitive personal data

No sensitive personal data will be processed in the study.

10. Sources of personal data

Personal data in the research is given by participants during the interviews.

11. Transfer and disclosure of the personal data to third parties

The personal data will not be transferred or disclosed to recipients outside the research group.
12. Transfer or disclosure of personal data to countries outside the EU/European Economic Area

The personal data will not be transferred or disclosed to recipients outside the EU/European Economic Area.

13. Automated decisions

No automated decisions are made.

14. Safeguards to protect the personal data

✔ The data is confidential.

Processing of direct identifiers:
✔ Direct identifiers will be removed in the analysis phase

15. Processing of personal data after the completion of the study

✔ The research material will be deleted

16. Your rights as a data subject, and exceptions to these rights

The contact person in matters concerning the rights of the participant is the person mentioned in section 1 of this notice.

Withdrawing consent (GDPR Article 7)
You have the right to withdraw your consent, provided that the processing of the personal data is based on consent. The withdrawal of consent will not affect the lawfulness of processing based on consent before its withdrawal.

Right of access (GDPR Article 15)
You have the right to obtain information on whether or not personal data concerning you are being processed in the project, as well as the data being processed. You can also request a copy of the personal data undergoing processing.

Right to rectification (GDPR Article 16)
If there are inaccuracies or errors in your personal data undergoing processing, you have the right to request their rectification or supplementation.

Right to erasure (GDPR Article 17)
You have the right to request the erasure of your personal data on the following grounds:

a) The personal data are no longer necessary for the purposes for which they were collected or otherwise processed.

b) You withdraw the consent on which the processing was based, and there are no other legal grounds for the processing.
c) You object to the processing (the right to object is described below), and there are no justified grounds for the processing.

d) The personal data have been unlawfully processed, or

e) The personal data must be erased to comply with a legal obligation in Union or Member State law to which the controller is subject.

The right to erasure does not apply if the erasure of data renders impossible or seriously impairs the achievement of the objectives of the processing in scientific research.

Right to restriction of processing (GDPR Article 18)
You have the right to restrict the processing of your personal data on the following grounds:

a) You contest the accuracy of the personal data, whereupon the processing will be restricted for a period enabling the University to verify their accuracy.

b) The processing is unlawful and you oppose the erasure of the personal data, requesting the restriction of their use instead.

c) The University no longer needs the personal data for the purposes of the processing, but you need them for the establishment, exercise or defence of legal claims.

d) You have objected to processing (see details below) pending verification of whether the legitimate grounds of the controller override those of the data subject.

Right to data portability (GDPR Article 20)
You have the right to request to receive the personal data you have submitted to the University in a structured, commonly used and machine-readable format and have the right to transmit these data to another controller without hindrance from the University, provided that the processing is based on consent or a contract, and the processing is carried out by automated means.

When exercising your right to data portability, you have the right to have your personal data transmitted from one controller to another, where technically feasible.

Right to object (GDPR Article 21)
You have the right to object to processing your personal data, provided that the processing is based on the public interest or legitimate interests. The University will no longer have the right to process your personal data unless it can demonstrate compelling legitimate grounds for the processing that override the interests, rights and freedoms of the data subject, or unless it is necessary for the establishment, exercise or defence of legal claims. The University can continue processing your personal data also when necessary for the performance of a task carried out for reasons of the public interest.

Derogating from rights
In certain individual cases, derogations from the rights described above in this section “Your rights as a data subject”, and exceptions to these rights may be made on the basis of the GDPR and the Finnish Data Protection Act, insofar as the rights render impossible or
*seriously impair the achievement of scientific or historical research purposes or statistical purposes. The need for derogations will always be assessed on a case-by-case basis.*

**Right to lodge a complaint**
You have the right to lodge a complaint with the Data Protection Ombudsman’s Office if you think your personal data has been processed in violation of applicable data protection laws.

**Contact details:**
Data Protection Ombudsman’s Office (Tietosuojavaltuutetun toimisto)  
Address: Ratapihantie 9, 6th floor, 00520 Helsinki  
Postal address: B.O. Box 800, 00521 Helsinki  
Tel. (switchboard): 029 56 66700  
Fax: 029 56 66735  
E-mail: tietosuoja(at)om.fi