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DIRECTED MOTIVATIONAL CURRENTS AND INDIVIDUAL DIFFERENCES: A MIXED-  
METHOD INVESTIGATION IN THE TURKISH EFL CONTEXT

Aycan DEMİR AYZ

Ph.D. Dissertation

Ankara, 2023

With leadership, research, innovation, high quality education and change,

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HEDEFLİ MOTİVASYON AKIMLARI VE BİREYSEL FARKLILIKLAR: TÜRKİYE'DE  
YABANCI DİL OLARAK İNGİLİZCE ÖĞRENENLER ÜZERİNE KARMA YÖNTEMLİ BİR  
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Ph.D. Dissertation

Ankara, 2023

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To the Graduate School of Educational Sciences,

This dissertation, prepared by **AYCAN DEMİR AYAZ** and entitled “DIRECTED MOTIVATIONAL CURRENTS AND INDIVIDUAL DIFFERENCES: A MIXED-METHOD INVESTIGATION IN THE TURKISH EFL CONTEXT” has been approved as a thesis for the Degree of **Ph.D.** in the **Program of English Language Teaching** in the **Department of Foreign Language Education** by the members of the Examining Committee.

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### **Abstract**

This study aimed at investigating the role of individual difference (ID) factors, namely self-regulatory strategy use, language learning effort, ideal L2 self, and imaginary capacity/vision in the long-term sustainment of Directed Motivational Currents (DMC). To do so, a longitudinal mixed-method sequential explanatory research design was employed. Quantitative data were collected from 305 tertiary-level EFL learners via a composite survey instrument and the structural interactions between the variables were analyzed via path analysis. Results displayed that self-regulatory strategy use and language learning effort directly and strongly predicted DMC. While the ideal L2 self exerted an indirect effect on DMC, vision exerted both direct and indirect effects. Qualitative data were collected through language learning diaries and first and follow-up interviews from 9 participants chosen via retrodictive qualitative modeling, and then analyzed utilizing content analysis. Findings supported the impact of self-regulatory strategy use and L2 learning effort in DMC. Volitional use of self-regulation by pure DMC cases was displayed. While the DMC group preferred meta-affective and meta-cognitive strategies to regulate the emotional and mental challenges of the current, cognitive strategies were the most favored ones in the DMC-like, No-DMC and starting in DMC-like, and ending in no-DMC groups. Language learning effort in the groups was mainly in line with their motivational and affective states. On account of these results, this study brings new insights into the individual level variability of the DMC construct and offers several pedagogical implications to ensure sustaining the intense motivational current for optimum benefit in the SLA context.

**Keywords:** DMC, self-regulatory strategy use, L2 learning effort, individual difference factors, path analysis.

## Öz

Bu çalışma, hedefli motivasyon akımlarının uzun vadeli korunmasında bireysel farklılıkların (öz-düzenleme stratejisi kullanımı, dil öğrenme çabası, ideal ikPeri dil benliği ve görselleştirme becerisi/vizyon) rolünü araştırmayı hedeflemiştir. Bunun için karma yöntem araştırma deseni kullanılmıştır. Derleme bir ölçek aracılığıyla yükseköğretim düzeyinde yabancı dil olarak İngilizce öğrenen 305 kişiden nicel veriler toplanmış ve değişkenler arasındaki yapısal etkileşimler yol analizi aracılığıyla incelenmiştir. Sonuçlar, öz-düzenleme stratejileri kullanımının ve dil öğrenme çabasının hedefli motivasyon akımlarını doğrudan ve güçlü bir şekilde öngördüğünü göstermiştir. İdeal ikPeri dil benliği hedefli motivasyon akımları üzerinde dolaylı etki gösterirken, görselleştirme becerisi/vizyon, hem doğrudan hem de dolaylı etkileriyle bu ilişkiler ağının merkezine yerleşmiştir. Nitel veriler geriye dönük nitel modelleme yoluyla seçilen 9 katılımcıdan dil öğrenme günlükleri ve birebir görüşmeler yoluyla toplanmış ve içerik analizine tabi tutulmuştur. Bu katılımcılardan motivasyon grafikleri verileri de toplanmıştır. Bulgular hedefli motivasyon akımlarında öz-düzenleme stratejilerinin oldukça önemli rol oynadıklarını ve süreçte bilinçli olarak kullanıldıklarını doğrulamıştır. Hedefli motivasyon akımlarını en saf haliyle yaşayan kişiler sürecin duygusal ve zihinsel zorluklarıyla başa çıkabilmek için üst-duygusal ve üst-bilişsel stratejileri tercih ederken, bu motivasyon akımlarını kısmen yaşayan, hiç yaşamayan ve kısmen yaşarken sonradan kaybeden katılımcılar bilişsel stratejileri tercih etmişlerdir. Ayrıca, katılımcıların dil öğrenme çabalarının motivasyon yoğunlukları ve duygu durumlarıyla senkronize şekilde sürdürüldüğü görülmüştür. Elde edilen sonuçlara dayanarak, bu çalışma hedefli motivasyon akımlarının yapısının bireysel faktörlere bağlı olarak gösterdiği değişkenliğine yeni bakış açıları getirmekte ve yabancı dil öğrenme sürecinden optimum düzeyde faydalanmak için yoğun motivasyon akımının sürdürülmesini sağlamaya yönelik pedagojik çıkarımlar sunmaktadır.

**Anahtar sözcükler:** hedefli motivasyon akımları, öz düzenleme stratejileri kullanımı, dil öğrenme çabası, bireysel farklılık faktörleri, yol analizi.

*To my family and,*

*To the memories of my previous supervisor Prof. Dr. İsmail Hakkı ERTEN*



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## Symbols and Abbreviations

**DMC:** Directed Motivational Current

**EFL:** English as a Foreign Language

**ESL:** English as a Second Language

**ID:** Individual difference

**L1:** First Language

**L2:** Second/Foreign Language

**RQM:** Retrodictive qualitative modeling

**SLA:** Second Language Acquisition

**SR:** Self-regulation

**SRL:** Self-regulated Learning

**SPSS:** Statistical Package for the Social Sciences

## Chapter 1

### Introduction

This study aims to investigate Directed Motivational Currents (DMC) in relation to individual difference (ID) factors, specifically self-regulatory strategy use, language learning effort, ideal L2 self, and imagery capacity/vision with an explicit focus on the first and second ID variables. In this chapter, statement of the problem, aim and significance of the study, research questions, assumptions of the study, limitations of the study, and definitions of key terms will be covered.

#### Statement of the Problem

This study has been initiated to cast light upon the individual difference variables with the potential determining impact on the strength and sustainability of DMC experiences. While initial studies on DMC have scrutinized the unique structure of that novel motivational construct (e.g. Dörnyei, Ibrahim, & Muir, 2015; Muir & Dörnyei, 2013), ID factors leading to individual-level variability in it has been under-researched and therefore suggested by many researchers for further studies (Safdari & Maftoon, 2017; Selçuk & Erten, 2017). The agenda on the interactions between DMC and ID factors initiated by Zarrinabadi, Ketabi, and Tavakoli (2019) was dedicated to autonomy, willingness to communicate (WTC), self-confidence, and self-concept. Sak (2021) pursued the research trend examining DMC in relation to personality traits. Jahedizadeh, Ghonsooly, and Ghanizadeh (2021) focused on DMC in relation to the following ID factors: personal best, buoyancy, evaluation apprehension, and academic achievement. Although they shed light on the dynamicity and variability of DMC with their substantial findings, there remain a great number of parameters impacting the intense motivational current.

DMC has been introduced into the field by Dörnyei and his colleagues (e.g. Dörnyei et al., 2015; Muir & Dörnyei, 2013) as an automatized process without any

obstacles and conscious self-regulatory interventions to sustain its long-term functioning. It has been described as a self-propelling construct producing and using its own energy and re-fuelling it via its own unique structural features in cases of deficiencies. On the other side, considering the key components of DMC and self-regulation, it is highly possible that various strategies of self-regulation such as goal-orientation, generating visual representations of the goals, self-monitoring, and self-evaluation may support the strength and persistence of DMC. They are likely to guide the learners to set their goals, create a vision of the goals, and pursue the process successfully. Although DMC is a process of optimal engagement in tasks and is highly intensive by nature, it is not without obstacles. Potential challenges of the DMC experience due to its emotionally, mentally, and physically demanding nature have been unveiled by contemporary research (Başöz & Gümüş, 2022; Jahedizadeh & Al-Hoorie, 2021; Jahedizadeh et al., 2021; Pietluch, 2022; Sak & Gürbüz, 2022). Thus, volitional interventions during the current via self-regulatory strategies were likely for several reasons, and further investigation was needed.

### **Aim and Significance of the Study**

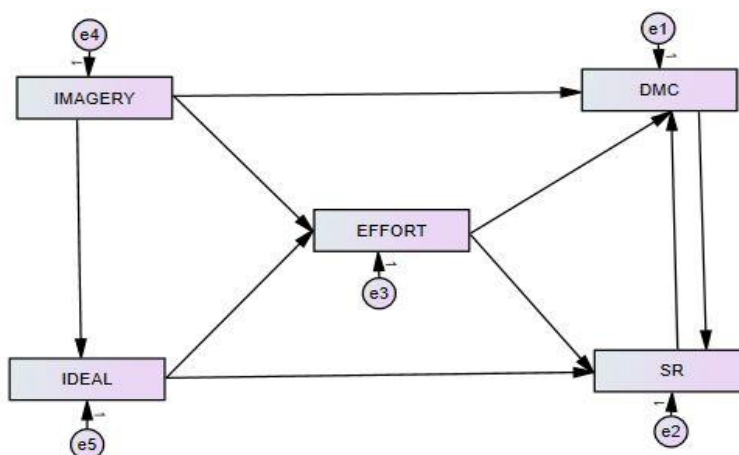
The main problem of this study is to investigate the structural interactions among DMC dispositions and several ID variables which are self-regulatory strategy use, language learning effort, ideal L2 self, and imaginary capacity/vision of tertiary level EFL learners in the Turkish higher education context. Based on the studies reported in the literature, a model of the interactions of the variables has been hypothesized by the researcher (see Figure 1). The model is tested using path analysis, and the researcher endeavors to indicate the direct and indirect relationships among the variables. The model has been specified depending on the following research studies.

A direct path from language learning effort to self-regulated strategy use has been hypothesized based on Kormos and Csizer's (2014) findings. A direct path from the ideal L2 self to the effort has been foreseen depending on the same study (Kormos & Csizer,

2014). Thus, an indirect path from the ideal L2 self to self-regulation has been hypothesized via the mediation of learning effort (Kormos & Csizer, 2014).

**Figure 1**

*The Hypothesized Model of DMC Generated by the Researcher to be Tested*



Vision has been directly linked to learning effort in the hypothesized model (Dörnyei & Kubanyiova, 2014). A direct path from vision to ideal L2 self has also been assumed (Dörnyei & Chan, 2013; Murray, 2013). An indirect path from vision to self-regulation has been hypothesized via ideal L2 self and language learning effort. Considering that vision-orientedness is one of the main hallmarks of DMC (Dörnyei et al., 2015), it is quite reasonable to assume the direct path from vision to DMC.

A direct path from self-regulation to DMC has been presumed considering the definition provided by Dörnyei et al. (2015) stating that DMC "...can be seen as vision-led self-regulation along a fitting, made-to-measure pathway that augments and sustains exerted effort" (p. 103). Although nonconscious self-regulation is likely implied in the definition, there is no evidence in the literature to clarify whether consciousness is included in the process or not, which forms a basis for the current study as well. The relationship between self-regulation and L2 motivation also implies the direct link from self-regulation to DMC. Vidal-Abarca, Mana, and Gil (2010) and Bembenuity (2011)

suggest that self-regulation is effective in increasing students' motivation. A direct path from L2 learning effort to DMC has also been hypothesized based on the definition above and also considering the required investment of time, energy, and emotional and physical states in DMC experiences.

Although DMC has been defined as an unforced automatized process without volitional self-regulatory interventions by Dörnyei et al. (2015), a direct path from DMC to self-regulation has been presumed based on contemporary research by Başöz and Gümüş (2022) and Sak and Gürbüz (2022) displaying self-regulatory strategy use at various stages due to mental, physical and emotional challenges in the current.

Following the structural analysis of the hypothesized model above, a profound investigation of the use of self-regulatory strategies by the learners who have pure DMC experience, DMC-resembling experience, no DMC experience, and initially DMC-like and then No-DMC experience has been targeted in this study via qualitative data. In addition, exploring the L2 learning effort states of the learners in different DMC groups within a dynamic perspective has been intended. Appearing to be one of the two strongest direct predictors of DMC experience as a result of the quantitative data analysis stage, the L2 learning effort needed further investigation. The potential effects of L2 learning effort on the strength and maintenance of DMC and also its interaction with motivational and affective parameters of the DMC construct are deeply analyzed.

This research study differs from previous ones since it utilizes a longitudinal mixed-method research design including various data collection tools to elaborate on the results. Collecting data from a large sample group, it is the first attempt in the SLA field to provide a detailed representation of the structural interactions among DMC and individual difference factors via path analysis. With this analysis, rather than single mediation of each variable, both direct and indirect effects with multiple mediators were estimated among the variables, and revealing the mediation effect of each variable in the presence

of the others was ensured. To do so, a complex model was generated to be tested by the researcher (see Figure 1).

This research study is also a significant step to fill in the research gap regarding the ID factors affecting the strength and long-term sustainment of DMC experience as well as enriching the literature on the factors leading to individual levels of variability in DMC experiences. In addition, it utilizes a longitudinal research design to provide a profound investigation of the presence or absence of consciously applied self-regulatory strategies by EFL learners during the DMC process. It is also original in that the types of volitional self-regulation interventions utilized by different DMC profiles and the contexts they are used in are examined for the first time in the research agenda. Furthermore, this study presents a rigorous examination of the dynamic role of language learning effort during the intense motivational current. To conclude, it provides valuable insights into the individual level variability of the DMC construct and offers several pedagogical implications to ensure sustaining the intense motivational current for longer time-periods leading to optimum benefit for the learners in the SLA context.

### **Research Questions**

The present study is grounded on a sequential explanatory mixed-method research design and the research questions have been developed in line with it. While the first, second, and third questions are aimed at collecting quantitative data from a large group to reveal the structural interactions network between the variables, the last question is formulated to have a deeper understanding of the results via qualitative data. In line with these purposes, the following research questions guide the study:

1. What are levels of DMC dispositions and the related ID factors (self-regulated strategy use, L2 learning effort, ideal L2 self, and imagination capacity)?



2. What are the relationships between participants' DMC dispositions and the related ID factors (self-regulated strategy use, L2 learning effort, ideal L2 self, and imagination capacity)?
3. What are the interaction effects among Turkish EFL learners' DMC dispositions and the related ID factors (self-regulated strategy use, L2 learning effort, ideal L2 self, and imagination capacity) based on the literature-based hypothesized model (Figure 1)?
4. What do the participants report about their DMC experiences and self-regulated strategy use and language learning effort?
  - a. What are the characteristic features of DMC experiences in different DMC groups (e.g. DMC, DMC-like, No-DMC, and starting in DMC-like and ending up in NO-DMC groups)?
  - b. Of the ID factors that have a direct impact on DMC, what are the roles of self-regulated strategy use and language learning effort in different DMC groups from the perspective of the participants?

### **Assumptions of the Study**

The participants of the current study have been chosen on a voluntary basis and they have all signed the official consent form before the study. They have also been ensured that their answers would be kept confidential and used only for research purposes. Thus, it is assumed that they took part in the study willingly and that the students completed the quantitative instrument honestly with genuine information. It is also assumed that teachers in the focus group interviews and students in the one-to-one interviews shared their sincere answers and opinions due to the same reason. It is also presumed that students who are asked to keep language learning diaries wrote about their activities willingly reflecting their actual practices. Secondly, it is assumed that the sample group is representative of the whole population, namely tertiary-level EFL learners

in Turkey. The instruments have also been assumed to be appropriate for the study as well as providing true data after psychometric analysis. Translated survey instruments have been through translation and back-translation processes supported by experts in the field. In addition, the composite instrument has been piloted before the main study. Thus, it is assumed that the results of this study present the real interactions between learners' DMC dispositions, self-regulatory strategy use, L2 learning effort, imagery capacity, and ideal L2 self. In addition, qualitative data collection tools have been through revision processes based on expert opinion and then an inter-coder reliability check has been conducted on the results leading to the assumption that real data have been obtained.

### **Limitations of the Study**

The major limitation of the present research study is the number of items in the composite survey instrument. Since several ID variables are included in the study, collecting quantitative data with fewer items would not be possible. To overcome that limitation, first, the instrument has been piloted with a smaller sample group of participants to see how it worked, and then during the main study, the participants were given enough time to complete it. Another limitation is that only tertiary-level EFL learners from the Social Sciences University of Ankara were included in the study and the findings do not represent different learner profiles in Turkey. Thus, further studies on other groups are suggested to make further contributions to the limited DMC literature.

Since DMC is a novel construct still in the process of validation and identification, it has been hard to identify some hallmarks of DMC, such as progress checks or goal setting, as self-regulatory interventions or default components of the intense motivational current. To clarify, as stated by Peng and Phakiti (2022) as well, it has been a challenge for the researcher to distinguish between the roles of progress checks as a DMC component or as a meta-cognitive self-regulation strategy. To overcome that limitation, expert opinion has been resorted to. In addition, qualitative data has been subjected to an

inter-coder reliability check to eliminate the potential problem of the biased personal judgment of the researcher.

## **Definitions**

For this study, the following key terms will be defined below:

***Directed Motivational Current (DMC)***: It has been defined as “a prolonged process of engagement in a series of tasks which are rewarding primarily because they transport the individual towards a highly valued end” (Dörnyei, Ibrahim, & Muir, 2015, p. 98). It has “the capacity to align the diverse factors that are simultaneously at work in a complex system, thereby acting as a regulatory force” (Dörnyei, Henry, & Muir, 2016, p. 96). Since DMC is an intensive and goal-directed process by nature, it empowers the learners who experience it to perform at outstandingly immense levels that would not be expected of them under everyday circumstances (Muir & Dörnyei, 2013).

***Self-regulation***: Zimmerman (2000, p.14) explained it as “self-generated thoughts, feelings, and actions that are planned and cyclically adapted to the attainment of personal goals”. Zimmerman (1986, 1989) characterizes self-regulated learners as behaviorally, motivationally, and meta-cognitively active and dynamic individuals in the learning process. As reported by Zimmerman and Schunk (2008, p.1), effective self-regulators “set better learning goals, implement more effective learning strategies, monitor and assess their progress better, establish a more productive environment for learning, seek assistance more often when it is needed, expend effort and persist better, and set more effective new goals when present ones are completed”.

***L2 learning effort***: It is identified as a sub-construct of L2 learning motivation (Gardner, 2001) and it refers to the time, energy, and other personal resources spent on studying an L2. Gardner (2001) states that motivation to learn a language requires taking action to accomplish it, and the action stage corresponds to the effort in the process.

Thus, it can be stated that foreign language learning effort is “composed of motivated acts geared towards learning a non-native language” (Karabiyik & Mirici, 2018, p. 374).

**Ideal L2 self:** It is the “representation of all the attributes that a person would like to possess (e.g., hopes, aspirations, desires)” (Csizer & Dörnyei, 2005, p. 616). It refers to the promotion-focused self, which includes a clear vision of favorable future goals such as learning English to improve professionally and feel success (Csizer & Dörnyei, 2005). The learners with ideal L2 self personalize the value of reaching their L2 learning goals, which finally leads to internalization of them (Kim, 2009).

**Imagery capacity/Vision:** It refers to “the mental representation of the sensory experience of a future goal state” (Muir & Dörnyei, 2013, p. 357). Vision has been presented by researchers as among the strongest determiners of L2 motivation activating long-term effort (Dörnyei & Kubanyiova, 2014). It is also suggested to increase L2 motivation by helping learners create a clear ideal L2 self (Dörnyei & Chan, 2013; Murray, 2013).

## Chapter 2

### Literature Review

#### **Historical Background of Motivation: An Overview**

Although motivation studies have a history of approximately 100 years, the origins of the studies are based on ancient Greek philosophers such as Socrates, Plato, and Aristotle (Reeve, 2018). Initially, based on his learnings from Socrates, Plato suggested a hierarchical model of motivated behavior with three stages moving from the primitive level to the high level. While the basic and primitive level referred to appetitive aspects of the psyche such as bodily needs of hunger and sex, the second level identified social orientations as feelings of acceptance. Lastly, the highest level of the model, named as calculating aspect, was committed to the reasoning and decision-making mechanisms of the mind (Reeve, 2018). Aristotle also proposed a similar threefold explanation of the soul, only with different terminology for each level, flowing from the primitive level to the high level. His stages were named nutritive, sensitive, and rational levels. What deserves special attention regarding these models was that they solely explained human motives.

After centuries, the tripartite models suggested by the ancient Greek philosophers were replaced by dual explanations of the psyche, referring to the logical, intelligent mind, and irrational, impetuous body. Thereafter, grand theories of motivation were suggested based on the dualism of body and mind (Reeve, 2018). They sustained their popularity until the end of the 1960s to provide a comprehensive explanation of motivated behavior in each part of life (Weiner, 1990). Three main grand theories of the time were will, instinct, and drive which will be explained in the following section.

#### ***Grand Theories of Motivation***

**Will.** Rene Descartes, a French philosopher, suggested that the body was responsible for mechanical actions while the will was a purposive and active agent. Thus, to understand deliberate action, will needs to be analyzed. According to Descartes,

explaining motivated behavior would be possible only after making sense of the will. Thus, for hundreds of years, philosophers tried to resolve the complex nature and source of the will. However, they realized that while trying to understand motivation, they created a new phenomenon that did not help them to clarify motivated action but added to their unanswered questions. In addition, the will was a cabalistic construct since it was based on both innate characteristics of the organism and environmental and social issues of life. Hence, philosophical explanations of motivation based on it were deserted, and new lines of research were focused on (Reeve, 2018).

**Instinct.** Contrary to the previous theories based on philosophy, instinct emerged as a physiological principle intending to explain not only human behavior but also animal behavior. Darwin (1872) asserted that unlearned behaviors of animals such as nest building, chasing some other animals, or running away from danger could be due to their instincts which were innate and inherited. Since instincts were based on physiology and science, motivation studies left philosophy and humanities behind at that time. After Darwin, it was psychologist William James who made the phenomenon of instinct a popular explanation for motivated action (Kuo, 1921). James stated that there is a need for an effective stimulus to activate the instincts and to lead to a desired behavior. McDougall (1926) also supported James' ideas, adding that instincts were indispensable for actions and without them no behavior could be observed. Namely, he suggested that the genetic endowment of organisms was highly crucial.

On the other side, instinct was a controversial construct among various theorists who could not agree upon its existence and origins (Kuo, 1921). While the Darwinian perspective defined it as innate, coming from the beings' original nature, and fixed; others identified it as acquired, habitual acts shaped by the learnings from the environment and the authorities. Kuo (1921) who denied the inborn existence of instincts stated that habits are formed slowly since birth, but psychologists may fail to observe or realize them, and thus they consider the reactions as instincts. He also added that although the behavior

may not have been learned in itself, the parts of actions needed to complete the behavior may have been learned gradually. In addition, changes in life conditions lead to modified or new actions presenting the unfixed nature of responses to stimuli. Thus, Kuo (1921) concluded that other than a few random movements of babies, it is not rational to explain all human behavior based on particular instincts. In addition to the discussions regarding the existence of instincts, classifying them was also a problematic issue of the time. Different researchers created various lists of classifications, and they included thousands of instincts that mainly explained each specific behavior with a name tag rather than put them into categories (Bernard, 1924). Then, when the researchers lost control of the categorization, they left the effort for it.

Another criticism of the explanatory power of instinct on motivated action was about the bidirectional interactions between instinct and behavior. Kuo (1921) and Tolman (1923) claimed that while instinct was seen as the source of behavior, only the behavior itself could prove the availability of instinct. Since they could be explained only depending on each other, the lack of a third variable to support or falsify the connections between these two concepts was a contradictive issue. In line with that problem, Reeve (2018) suggested experimental designs manipulating environments and living conditions of completely similar animals, which would provide the third independent variable for the researchers. Studies conducted in that sense showed that the actions of the animals reflected their living conditions rather than their innate instincts (Reeve, 2018). Namely, the role of environmental contexts outperformed the role of innate instinct in explaining motivated behavior.

Despite the initial widespread acceptance of instinct theory to explain motivated behavior, due to the further investigations discussed above, the theory lost its popularity, which resulted in searches for alternative theories.

**Drive.** Drive theory, based on biology, suggested that behavior results from the bodily deficits that should be filled to satisfy the needs (Freud, 1915) and reach balance -

homeostasis (Hull, 1943). Freud (1915) and Hull (1943) were two pioneers of the theory with slight differences in their explanations of it.

According to Freud (1915), the source of motivated action was a biological need. To put it simply, as the intensity of the need increases, the organism would start searching for ways to meet it, which would result in complete satisfaction. For example, considering hunger as the drive, the aim would be to satisfy that need of the body by eating some food. This theory was criticized by researchers for three main reasons (Reeve, 2018). First of all, it was claimed to neglect the role of social and environmental factors with an overemphasis on biology. Second, Freud did not use experimental designs to support his ideas, but he relied on case studies. Lastly, the lack of experimental designs ruined the testability of his findings, thus they were considered intuitive and unempirical.

Similar to Freud, Hull (1943) also emphasized the physiological needs of the organism and explained motivated action as a quest for satisfying that need until reaching the balance. However, he diverged from Freud's theory by adding that behavior could be predicted by the environmental conditions of the organism. For example, a hunger drive would signal the food search. Thus, Hull was the pioneer of the scientific investigation of behavior in history, and thereafter it would be possible for researchers to manipulate the environment to study the motivated action. According to Hull's theory, drive only functions as "an energizer, not a guide" (Hebb, 1955, p. 249). Learnings and habits, resulting from the attainment of physiological balance and reduction in drive, would reinforce the actions of the organisms and they would guide the behavior. Similar to Freud's theory, Hull's drive theory was also not without criticisms. Dember (1974) claimed that it was not always physiological needs that would stimulate the behavior, but according to him, "the realm of behaviors referred to as 'exploratory' or 'curiosity motivated' provided a rich source of compelling examples" (Dember, 1974, p. 163). In other words, it was not possible for drive theories to explain motivated behavior completely by themselves.



In summary, similar to will and instinct, drive theories - both by Freud and Hull - also had some limitations which resulted in criticisms by the researchers. First of all, complete reliance on biological foundations was found problematic since many actions by organisms could not be explained only by physiology, and anorexia was a strong example of that (Klien, 1954). Hence, the power of environmental and external sources should not have been neglected. In addition, considering drive reduction as the sole way of learning was dubious. For example, studies on hungry rats showed that they would learn even when they were reinforced with some kind of placebo foods that were not nutritional at all (Sheffield & Roby, 1950). To conclude, these concerns inspired the pursuit of new explanations for motivated behavior, resulting in two new alternative theories which will be explained in the following section.

**Post-drive years.** As in the previous theories, the limitations of drive theories led researchers to investigate different ways of clarifying motivated behavior. The 1960s were the years when alternative theories of incentive and arousal emerged.

Incentives were defined as external stimuli that would activate organisms to approach or refrain from a behavior depending on the pleasing or punishing results of it. Unlike drive theories, incentive theory does not suggest satisfying the needs by reducing the drive, but it focuses on being in contact with the stimulus for positive reinforcement (Young, 1966). Thus, it is based on experiences rather than physiology, and it claims that hedonistic well-being is at the center of motivated behavior. Lastly, it emphasizes the dynamic nature of the motivated behavior based on the changes in the external stimulus (Reeve, 2018).

Arousal theory was considered to be a reinterpretation of the drive theory, with a slight difference in neurophysiological bases rather than physiological (Reeve, 2018). The main tenet of the theory was grounded upon how stimulated the brain mechanisms were by environmental factors (Lindsley, 1957). Briefly, the intensity of arousal was the key variable of the theory. While medium levels of stimulation from the external sources

produced optimal arousal and motivated actions, lack or extreme amounts of arousal caused, respectively, feelings of disinterest or fear and avoidance which would both result negatively in terms of motivated actions of the organisms.

For centuries, various grand theories of motivated behavior, which aimed at providing an all-encompassing explanation for actions, had been investigated by ambitious researchers, but none of them appeared to achieve it. Consequently, they faced the fact that it would not be wise to search for a comprehensive description of each action. Instead, research on different pieces of the motivational phenomenon under particular conditions with specific groups of people was initiated (in the 1970s) and mini-theories of motivation emerged during that time (Reeve, 2018). The shift from grand theories of motivation to mini-theories was described by Reeve (2018) as the end of the reign of grand theories and the beginning of the democracy of several new theories.

### ***Cognitive Revolution and Mini-theories of Motivation***

The field of psychology underwent a dramatic change in the 1970s, the traces of which became effective in motivation studies as well. During the decade, research on physiological and biological factors such as instinct, drive, arousal, and so on was deserted. Instead, a shift to cognitive processes of the human mind appeared in the foreground (Gardner, 1985). With that radical change, laboratory studies on animals were criticized by humanistic researchers, and experimental studies on them lost popularity (Reeve, 2018). Thereafter, human thought, beliefs, goals, attributions, self-concept, expectations, and plans emerged as new mental concepts to be investigated. Studies on individual difference factors related to learning such as anxiety, self, and so on were also initiated (Weiner, 1990). In addition, behavioristic theories of motivated action were disapproved during that time. Dember (1974) voiced that behaviorists' views lacked explanatory power on human actions since it was not possible to describe complex human actions based on stimulus-response interaction. For example, language or human

memory were challenging cognitive concepts to understand in that kind of a simplistic relationship network.

With that great paradigm shift in the field of motivation and the two other main problems with the grand theories, the era for the mini-theories of motivation was initiated (Reeve, 2018). First of all, throughout the years of grand theories, human beings were seen as passive agents that needed a drive or stimulus to behave. Back then, motivation was defined by Young (1961, p. 24) as “the process of arousing action, sustaining the activity in progress, and regulating the pattern of activity”. However, the new way of thinking emphasized that human beings were already active and motivated all the time for different behaviors. The never-ending actions of young children were considered the clearest indicators for that argument (Deci & Ryan, 1985). Secondly, grand theories were grounded mainly upon nonhuman laboratory studies which did not explain complex human behavior. For example, Weiner (1990) clearly stated that drive theories by Freud and Hull had no direct connection with human learning in the classroom context. Thus, with the new way of thinking, the attention of the researchers shifted to more social and daily life issues of humans. Several mini theories such as achievement motivation theory (Atkinson, 1964), attribution theory (Weiner, 1990), flow theory (Csikszentmihalyi, 1975), goal-setting theory (Locke, 1968), intrinsic motivation (Deci, 1975), and self-efficacy theory (Bandura, 1977) and so on came to the stage of motivation as a result of these problems.

Although a large number of mini-theories could provide explanations for motivated human actions, the rejection of grand theories had some negative consequences as well on the role of motivation within psychology (Reeve, 2018). While motivation studies had been the primary concern of many psychologists for centuries, through the end of the 1970s, they started to lose popularity. Until the beginning of the 1990s, the field of motivation was nearly neglected in psychology and cognitive investigations dominated the field. For example, at the University of Nebraska, an annual conference on motivation has

been organized since 1952; however, starting in 1979, the focus of that conference shifted to different topics other than motivation. Moreover, it was expressed by Mischel (1968) that motivation studies lacked generalizability for different conditions in that high motivation in language learning did not entail motivated behavior in doing sports or vice versa. Therefore, motivation researchers started focusing on various areas of psychology and also collaborating with psychologists from different subfields such as social psychology, clinical psychology, and so on to survive. Fortunately, that tendency resulted positively in terms of researchers adding to their perspective and developing different mini-theories (Reeve, 2018).

Finally, at the beginning of the millennium, motivation research regained its popularity and still sustains it with various mini-theories explaining a part of motivated behavior from a different point of view.

### **Introduction to L2 Motivation and DMC**

Language learning motivation research has evolved in the last decades to focus on the dynamic nature of L2 motivation, while in previous studies from the 1950s to 1990s, it has been regarded as a stable phenomenon. The Process-Oriented Period of the 1990s has become the turning point for the field when Dörnyei and Otto (1998) introduced three stages of L2 motivation which were pre-actional, actional, and post-actional stages. The first one was the period of initiating motivation whereas the actional stage was related to sustaining it, and the post-actional stage was concerned with the evaluation of motivation. This era has been followed by the Socio-Dynamic Period which was centered upon the L2 Motivational Self-System proposed by Dörnyei (2005). During that time, a future-oriented perspective on L2 motivation has attracted attention. Soon after, though, Dörnyei, Henry, and Muir (2016) criticized that view as it was still not built on the dynamic prPeriple which is concerned with sustaining the effort for longer terms, but stability was in the foreground. Similar to previous theories, it emphasized a linear cause-and-effect relationship between

motivation and action. Since it has already been acknowledged that motivation is not a constant individual difference construct, but it is a “dynamic, process-oriented manner” (Dörnyei et al., 2016, p. 28), extending future-self guides of L2 motivational self-system into vision has been the new resolution. Vision has been described as the learners’ illustrations of their future goal states (Dörnyei & Chan, 2013, Dörnyei, Ibrahim & Muir, 2015; Dörnyei, Muir & Ibrahim, 2014; Henry, Davydenko & Dörnyei, 2015; Ibrahim, 2016; Muir & Dörnyei, 2013) and considered as the construct that could energize the long-term effort leading the learners to sustain their motivated behavior (Dörnyei et al., 2016). Being a vision-oriented concept, Directed Motivational Currents (DMC) entered the field during that time as an explanation of long-term behavior. According to Dörnyei (2020), DMC complies perfectly with the evolution of L2 research because it is strongly linked with goals and vision, complex dynamic systems, and long-term motivation.

DMC has been defined as “a prolonged process of engagement in a series of tasks which are rewarding primarily because they transport the individual towards a highly valued end” (Dörnyei et al., 2015, p. 98). It has “the capacity to align the diverse factors that are simultaneously at work in a complex system, thereby acting as a regulatory force” (Dörnyei et al., 2016, p. 96). Since DMC is an intensive and goal-directed process by nature, it empowers the learners who experience it to perform at outstandingly immense levels that would not be expected of them under everyday circumstances (Muir & Dörnyei, 2013). DMC is such a powerful drive that it is clearly identifiable by the people who witness it (Dörnyei et al., 2014). Moreover, the highly intense level of motivation in that current affects not only the learners’ own life but also the people around them such as their families and friends (Zarrinabadi & Tavakoli, 2016).

Generating significant changes in the person, DMC should not be confused with high levels of motivation which is only an individual difference factor. While a fully-fledged DMC state may seem quite similar to the general motivational dynamics, its main difference is the “optimal level of cooperation” of many motivational elements which

ultimately leads to an “optimal form of engagement” by learners (Dörnyei et al., 2016, p. 33). It is asserted not to require conscious control of the behavior through self-regulatory strategy use because the individual caught up in that current does not see any obstacles to overcome during the process. DMC is defined as an unforced automatic process that both produces and uses the energy needed to function (Dörnyei et al., 2014; Muir & Dörnyei, 2013), and Dörnyei et al. (2016) suggest that self-regulation cannot explain the goal striving in DMC-like constructs.

DMC is similar to the flow experience put forward by Csikszentmihalyi (1988) in some ways and different in many other aspects. Flow refers to a deep concentration on a daily short-term activity that is enjoyable for the individual (Dörnyei et al., 2016). It is mostly experienced in activities such as doing sports, playing games, producing artistic works, and so on, which cause losing track of time and not feeling exhausted. Contrarily, DMC is concerned with long-term diverse tasks that are not necessarily enjoyable by nature, but the enjoyment is related to practicing the activities and approaching the highly valued target goal (Ibrahim, 2020). Therefore, the activities in the DMC process are not necessarily intrinsically rewarding, but they are substantial steps needed to reach the goal. Ibrahim and Al-Hoorie (2019) refer to DMC as “sustained flow (SF)” reflecting it as a continuation of the flow theory (p.51). According to them, SF recognizes the significant role of the root term “flow” in creating the construct and it also does not lead to a terminology burden in the field as a new concept. They also present “shared sustained flow (SSF)” as an equivalent for the group-level DMC due to the very same reasons.

Since DMC is a dynamic concept affected by individual, temporal, and circumstantial factors, it shows great variations that make it hard for researchers to define and investigate it empirically. Although it is not much predictable, four core components, which are goal/vision-orientedness, triggering factors and launch, salient facilitative structure, and positive emotionality, help resolve its complexity to some extent.

After this brief introduction to DMC, the following sections will cover it in detail referring to its core components and the relevant motivational theories. Then, the wane of DMC, an overview of group DMC, recent studies on DMC, and finally practical implications will be presented.

### **Core Components of DMC**

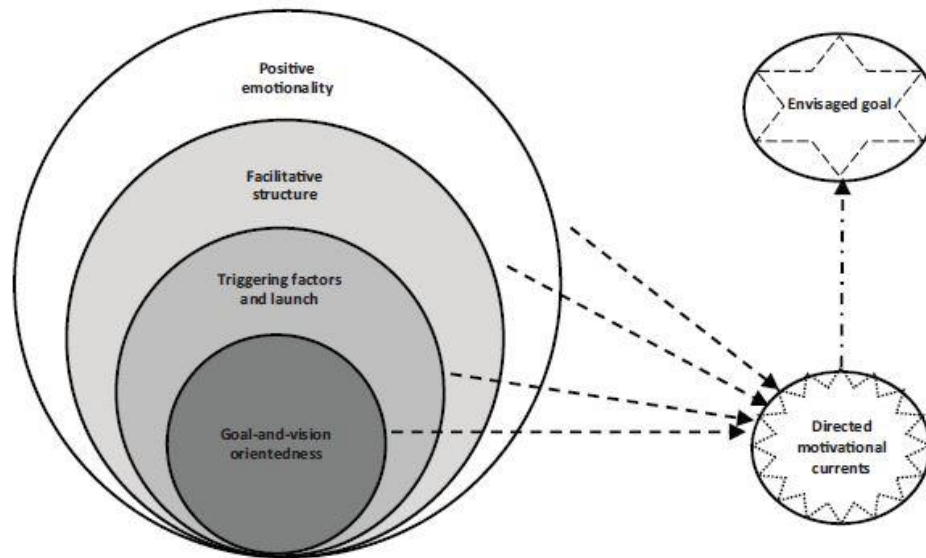
The four main components of DMC experiences are goal/vision-orientedness, triggering factors and launch, a salient facilitative structure, and positive emotionality (Dörnyei et al., 2016).

#### ***Goal/vision-orientedness***

DMC is called “directed” due to its directional feature from the source of motivation to the end goal (Dörnyei et al., 2016). In DMC, a specific end goal is always available, which distinguishes it from flow experience, and every single action is taken to attain that goal. Previously, the goal-setting theory by Locke and Latham (1990) in motivational psychology aimed to explain different behaviors of individuals based on their goal attributes. According to these scholars, the nature of the goals is highly crucial for motivated action. To clarify, they need to be difficult and specific enough. The learners should also be informed that the goal is significant and achievable for them, so their level of goal commitment could be much higher. According to Dörnyei et al. (2016), although goal-setting theory seems plausible from some aspects, their lack of specificity in explaining what makes goals significant for the learners and whether each goal that is perceived as important can create a sustained long-term behavior led to criticisms. Therefore, DMC includes three extensions which are vision, self-concordant goals, and proximal sub-goals to elaborate further on the goal-setting theory (Henry et al., 2015).

### **Figure 2**

*Core Components of DMC (Peng & Phakiti, 2022)*



Vision has been defined as “the imitative representation of real or hypothesized events” (Pham & Taylor, 1999, p. 250) and it has been put forward “as an attempt to conceptualize a higher-order factor which can explain sustained behavior” (Dörnyei et al., 2016, p. 42). Muir and Dörnyei (2013) state that it causes “emotional reactions” (p. 358) for the learners and as they have already experienced and tasted success in their visions, the urge to make it real does not allow learners to abandon their effort. Originating from the Possible Selves Theory by Markus and Nurius (1986), vision is a key construct of the L2 Motivational Self System. Ideal L2 self and ought to L2 self have been presented as the primary future self-guides in the L2 Motivational Self System theory. Briefly, the ideal L2 self refers to an image of what the individual *would like* to become while ought to L2 self is concerned with what the person thinks that he/she *ought to* become to meet the expectations of significant others (Dörnyei, 2005). Possible Selves Theory includes the feared self as well which is related to what the individual is *afraid of* becoming. The discrepancy between the *current self*, which can be defined as the actual self, and the desired self is the impetus activating the motivated behavior (Higgins, 1987). Clarity of the future-related image is of paramount importance at that point because how individuals imagine themselves in the future outlines their present behaviors.



The directedness of the goal in a fully-fledged DMC state is strongly linked to the detailed, clear, and robust vision of speaking the target language proficiently in the future. The vision also needs to be attainable and regularly activated to promote the energy to make it real. As Muir and Dörnyei (2013) state:

By combining a powerful vision of a future self with a matching and highly structured behavioral sequence, we may be able to consciously create a motivational surge of energy which can focus action towards a specific target in the future. (p. 358)

In addition, the inclusion of sensory elements in vision implies advantages such as evolving the abstract end goal into more personalized and concrete images to enhance its motivational strength (Dörnyei & Kubanyiova, 2014). However, sensory elements are not the sole ways of personalization. In addition to deciding on the goal by themselves, and creating the vision of it using their senses, another way to help learners personalize the goals is warranting that they are self-concordant. Self-concordant goals are defined as being deeply connected with the identity of individuals (Sheldon & Elliot, 1999). They need to be in line with the learners' beliefs, values, interests, wishes, desires, and so on. As Sheldon and Elliot (1999) explain, they are "one type of self-concept, and a very important type, given that they energize and direct some much of people's behavior" (p. 485). Furthermore, it is vital for the vision of these goals to be a part of the learner's transportable identity, referring to all kinds of individual features of a person such as sex, expectations, dreams, and culture (Zimmerman, 1998). If the created vision of L2 does not comply with these characteristics, it is not wise to talk about internalization by learners, and then it is condemned to be abandoned. To emphasize the significance of an internalized vision, Safdari and Maftoon (2017) state that "personally cherished goals function like a bright light flashing at the end of a dark tunnel" (p. 51). So, it can be inferred that even though the journey to the end of the tunnel may seem tough, seeing the vision of the end goal through the senses makes the process much easier and even more

exciting. To add more, self-concordant goals have the power to start a DMC experience thanks to two characteristics: initiating an activity and pursuing it even though it may not be enjoyable and providing constantly refreshed energy to keep it. Dörnyei et al. (2016) clarify the significance of these goals in their seminal book expressing that they lead to long hours of exceptionally enthusiastic studying periods with great energy for the individuals caught up in the current.

Besides self-concordant goals, regular proximal sub-goals are also of great value in DMC experiences to pursue the energy current. According to Bandura and Schunk (1981), learners who set regular proximal destinations rather than distal goals are more susceptible to being successful in attaining them. The reason is explained to be that while distal goals seem too far away to be achieved, proximal ones are shorter-term and guide the individual on the way to the end goal. They also help change the end goal from a state of dream or fantasy to a real and feasible one so that a stronger and more sustainable motivation may occur.

### ***Triggering Factors and Launch***

The launch of DMC is as substantial as its consecutive stages (Muir & Dörnyei, 2013). Considering that it provides a very powerful stream of energy for sustained behavior, it is vital to investigate its key components which create the optimum environment and conditions to initiate DMC. For a successful launch, two factors are crucial: essential conditions that are related to circumstantial, individual, and time factors, and a triggering stimulus.

Complex dynamic systems such as DMC are considerably dependent on the initial conditions (Larsen-Freeman, 2015). Larsen-Freeman states that even a minor change in these circumstances may lead to great effects on sustaining the process, which is termed the butterfly effect. For example, Xodabande and Babaii (2021) revealed that an insignificant encounter with German on TV functioned as the triggering stimulus for a

participant and led to the butterfly effect initiating the current to learn the language. Ideal conditions to trigger a DMC state include a clear set of goals, a sense of ownership and control by the learner, a perceived balance of challenges and skills, openness to the DMC experience, and other general motivational conditions in the classroom (Dörnyei et al., 2016). A clear set of goals is significant for DMC experiences as they grant direction and meaning across the process. Sense of ownership and control refers to the individuals' personal opinions as to whether the success and failure of the process are under their control. Without feeling ownership of the process, it is not possible to initiate the current. It is also substantial for the learners to believe that their skills and capacity are sufficient to cope with the difficulties of the whole process, which is defined as the perceived balance of challenges and skills. Openness to DMC experience denotes being motivated by feeling challenged. Finally, general motivational conditions in the classroom are concerned with group-level DMC and they mainly cover teachers' positive behaviors and their relationship with students, the availability of a supportive and warm classroom atmosphere, and the attitudes of learners towards each other. However, it is not reasonable to assume that the presence of ideal conditions results in the same motivational intensity for everyone. It should be cautioned that even in similar situations, a triggering factor may not function the same, or it may not lead to identical results every time (Muir, 2020; Zarrinabadi & Khodarahmi (2021).

Without a triggering stimulus in the process, the existence of primary conditions does not serve the purpose. The stimulus can appear in diverse forms (Dörnyei et al., 2016). For example, Dastgahian and Ghonsooly (2018) initiated DMC to understand religious texts via teaching spiritual word items to the students. Zarrinabadi et al. (2019) presented that positive feedback and encouragement from significant others, communicating with tourists, or inability to understand the L2 triggered the current. Moreover, a desired opportunity, searching for a small piece of information on something, or even a coPeridental event may trigger the process and lead to the current (Dörnyei et

al., 2016). Investigating group-level DMC, Zarrinabadi and Khodarahmi (2021) reported that “others-related factors (e.g. goal contagion and salient others) and social-situational factors (e.g. critical life Peridents, ego threat, responsibility) triggered DMC” (p.12). Finally, Dörnyei and his colleagues (Dörnyei et al., 2016; Henry et al., 2015) suggested that the presence of ideal conditions automatically functions as the stimulus to initiate the group-level DMC. When the current is initiated, a “motivational autopilot” (Muir & Dörnyei, 2013, p. 365) starts functioning, and the everyday actions of the learner transform into new behaviors contributing to the attainment of the final goal. However, the launch of DMC through triggering stimulus does not entail that the current of energy will last for lengthy periods but “multiple mini-explosions of motivational impetus” (Dörnyei et al., 2014, p. 70) periodically recharge the process to ensure its permanence until reaching the end goal.

### ***A Salient Facilitative Structure***

A salient facilitative structure is the third recognizable feature of DMC experiences. “Functioning as a perceptual route map” from the initiation of the current to the end of it (Henry et al., 2015, p. 331), the structure contributes to the accomplishment of the final goal effectively. As noted by Dörnyei et al. (2015), the pathway is composed of three main factors that are behavioral routines, sub-goals and progress checks, and affirmative feedback.

Behavioral routines suggest following a set of practices that are perceived as indispensable parts of the current (Dörnyei et al., 2016). According to Dörnyei et al. (2016), these routines are important since they do not require any conscious control, but they function within the “motivational autopilot which allows the initiation and execution of learning activities to become a semi-automatic process” (p. 83). They are so internalized by the learners in DMC that even a short period of deviation from them may cause feelings of frustration and guilt (Dörnyei et al., 2014). That unconscious nature of automatized behavior provides a “protective shield” (Dörnyei et al., 2016, p. 86) for sustaining the goal. For the learners caught up in DMC, supreme levels of dedication to

the end goal eliminate all of the other options for behavior and the single-mindedness of the person removes distractions from the process. Thus, the only choice is to follow the routines to achieve the goal.

Subgoals are the other substantial elements of the DMC construct. As discussed in the previous section, they are milestones in directing the current to the end goal. Besides providing directionality, another major role of them is enabling learners to evaluate their development. Functioning as progress checks, they create the essential energy for sustaining the motivated behavior, and after investing enough time and energy into the process, the accomplished sub-goal leads to the feeling of satisfaction on the part of the individuals in the current. In this regard, Dörnyei et al. (2014) emphasize that individuals “may only continue in a DMC if they have a clear and ongoing perception that they are on track towards achieving their vision” (p. 15). Similarly, through the study conducted among Iranian EFL teacher trainees who were caught up in DMC to be competent language teachers, Zarrinabadi and Tavakoli (2016) revealed that “progress checks and external feedback exerted a positive impact on sustaining motivation by increasing the participants’ self-confidence and perceived competence to teach English” (p. 163). Thus, it can be articulated that sub-goals have great motivational power on learners (Dörnyei et al., 2016).

Introduced as the last constituent of a salient structure, feedback has been described as the information given by an agent, such as an expert, a teacher, a friend, or a family member about a person’s performance or comprehension (Hattie & Timperley, 2007). Commonly used as an educational instrument, they help foster the explicitness of the criteria for success. Feedback can be of two types in terms of its function (Voerman, Meijer, Korthagen & Simons, 2012). The first one, progress feedback, is focused on how much the learner improved from the starting point, while the second, discrepancy feedback, is concerned with how much is left to the goal. In other words, progress feedback emphasizes the achievement so far, and the latter underlines what has not been

attained yet. DMC experiences are associated with progress feedback to highlight what has already been attained so that the final goal also seems accessible (Dörnyei et al., 2016). As Henry et al. (2015) state to explain the significance of affirmative progress feedback:

Feedback loops ... function in ways that make achievements visible as viewed through the eyes of important others. Confidence in their ability to succeed is generated, self-efficacy is enhanced, and a conviction that autonomous learning practices are successfully moving them toward long-term goals is instilled. (p. 339)

They also add that this kind of feedback fosters producing the energy for the following steps of actions, and therefore it is highly supportive in the DMC process.

### ***Positive Emotionality***

Besides goal/vision-orientedness, triggering stimulus, and a well-tailored structure, DMC experiences have a fourth component which has been described as the magical aspect of it: positive emotionality. That “mysterious” and “magic” feature (Dörnyei et al., 2016, p. 100) can be described as the satisfaction and enjoyment felt by the learners in the current throughout the whole process (Dörnyei et al., 2016). It is associated with the feeling that the person is doing something valuable, useful, and meaningful leading to the target goal in the end (Dörnyei et al., 2014). That state of emotionality is also one of the features of DMC explaining its self-propelling nature (Muir & Dörnyei, 2013). Dörnyei et al. (2015, p. 101) reported that “the enjoyment is projected from the overall emotional loading of the target vision; it is as if each step along the way reproduces or becomes permeated with some of the joy linked to the overall journey” (p. 101). As clearly expressed by them, each phase produces pleasure which fosters further energy for the end goal vision. Even though the activities carried out during the process may seem extremely dull for the other people, they are satisfactory for the person in the current not only to reach the final goal but also because doing each of them generates some joy and satisfaction. Furthermore,

these feelings are not temporary as in daily fun activities, but they are completely linked to the self-perception of the individuals. Therefore, it is possible to talk about a sense of “connectedness between activity and identity” (Dörnyei et al., 2016, p. 103) that does not fade away following the completion of pleasurable parts of actions.

The long-term nature of the positive emotional loading is attributed to eudemonic well-being conceptualized by Waterman (2008) as “a constellation of subjective experiences including feelings of rightness and centeredness in one’s actions, identity, the strength of purpose, and competence” (p. 236). It is linked to self-actualization because only the activities that help the learners improve their abilities, and reach their purposes in life can create that feeling (Waterman, 1993). In other words, it is a quite lengthy experience on the track of a self-concordant goal. According to Huta and Waterman (2013), it is not possible to picture eudaimonia without the accompaniment of authenticity. Being an individual trait, it refers to the opportunity of the learners to be themselves and to have complete command of the learning process (Dörnyei et al., 2016), and in this regard, it denotes a different meaning than the authenticity of teaching materials.

It has been revealed by Lenton, Bruder, Slabu, and Sedikies (2014) that a strong relationship is present between authenticity as a personality trait and the ideal L2 self. As suggested by them, learners feel intense levels of authenticity when the situations are corresponding to their ideal self-images, and a powerful feeling of authenticity can be created only by giving the learners the chance of being themselves. To put it in a different way, sustainable long-term motivated behavior can only be reached when individuals are included in learning situations conforming to their transportable identities and ideal self. Preventing the learners from going by their transportable identities in the learning process limits the authenticity and the liveliness of their ideal future selves (Ushioda, 2011). Hence, authenticity is a crucial construct in DMC as it creates permanent feelings of happiness and pleasure, eudemonia in other words.

## **Motivational Theories Related to DMC**

Despite being a fresh and innovative construct in motivation studies, the components of DMC are not brand-new. They have roots in many other motivational theories in the field (Dörnyei et al., 2014). In that section, the theories most relevant to various aspects of DMC will be covered.

### ***Goal Setting Theory***

To launch DMC, first and foremost, the existence of a valued goal is fundamental. The vision of an explicit end goal and the sub-goals leading the learners to it are significant components of DMC as it is a goal/vision-oriented construct. This aspect of DMC makes it highly relevant to the goal-setting theory by Locke and Latham (1990), the main principle of which is that goals are the primary driving forces for individuals to act in a specific direction. The levels of difficulty and explicitness of the goals, and concordantly, the commitment to them are determining factors of the success or failure of the goals. Another component that is related to DMC is the proximal sub-goals. Contrary to distal goals which are long-term, proximal sub-goals are set for the short term, and therefore, they give the learners a sense of achievement sooner though in smaller pieces. Besides enabling them to feel the success and act in a more motivated way, they also enable reflecting on the progress thanks to the feedback they provide as a result of the evaluation of the process. In these aspects, goal-setting theory is one of the bases of DMC.

### ***Self-determination Theory***

The relationship between the self-determination theory by Deci and Ryan (1985) and DMC stems from intrinsic motivation, a core concept of self-determination. The main tenet of this theory is that learners seeking personal enjoyment and pleasure in the learning process (intrinsically motivated) are more likely to pursue motivated behavior than the ones who wish for external reward or praise (extrinsically motivated) (Deci & Ryan, 1985). Therefore, autonomy and self-regulation are indispensable parts of that



theory leading to higher levels of intrinsic motivation (Safdari & Maftoon, 2017). The corresponding aspect of DMC for intrinsic motivation is the ownership of the goal the learner feels in the process. Intrinsically motivated and autonomous learners who feel in control of their success or failure are more likely to pursue motivated behavior, which explains the long-term effort in DMC.

### ***Theory of Planned Behavior***

The theory of planned behavior by Ajzen (1988, 1991) asserts that individuals continue the motivated behavior only when they believe that the process is within their control and there are no challenges they cannot handle. That principle of the theory is in line with the perceived behavioral control in DMC, which refers to the belief on the part of the learners that they have the capacity and skills to reach the final goal (Dörnyei et al., 2014). The visionary aspect of DMC is also important at that point since the clear and explicit vision of the end goal fuels the learners' energy to believe that they have the skills and can do the job without any obstacles on their way to reaching the imagined goal.

### ***Theories of Self-imagery and Vision***

As described under the title of "Goal/vision-orientedness", DMC is a vision-oriented concept. Imagery or vision is based on the Possible Selves Theory by Markus and Nurius (1986), and it mainly asserts that the future self-images of individuals affect their current behavior. For example, a clear vision of an ideal L2 self leads to motivated action to reach it in the end. Thus, a detailed vision of a desirable end goal leads to long-term motivation, and it is the construct that has been suggested to explain the sustained motivated behavior experienced in DMC. Self-imagery or vision underpins the directedness of DMC as well since the flow of the current is always from the starting point to the final goal which becomes tangible due to the created vision of it.

### ***Flow Theory***

Motivational autopilot, which can be defined as being completely lost in an activity and losing track of time, can be observed both in the flow experience suggested by Csikszentmihalyi (1988) and in DMC. The common ground of these theories lies in the intensity of the engagement in the task or action. However, they also have some distinguishing features. For example, flow is a shorter-term experience than DMC and is mostly related to single tasks. On the contrary, the DMC experience lasts for lengthy periods including many tasks following one another to reach the final goal. Moreover, the activities in flow are mostly enjoyable by themselves and they are intrinsically rewarding. The ones in DMC do not have to be pleasurable, but the joy of DMC experiences is mainly derived from the perception of being transported to the end goal (Henry et al., 2015). Thus, it is rather explicit that DMC and flow experiences both share many features and differ in many other aspects.

### ***Time Perspective Theory***

Time perspective theory is concerned with whether the individuals' actions are mostly past, present, or future-oriented (Zimbardo & Boyd 1999). DMC is related to the future time perspective of this theory denoting that present actions are targeted to reach more distal goals in the upcoming periods, so there is no anticipation of an immediate reward. It has been revealed in the study by De Volder and Lens (1982) that learners who are future-oriented continue their effort with greater persistence and end up with more successful results. There is a strong relationship between future-orientedness and achievement, which also manifests itself in DMC. To clarify, the learners in DMC who continue their actions to reach the imagined future goals without allowing for the interruptions of today's conditions attain the desired outcome in the end.

### ***Dynamic Systems Approach***

During the last years of motivation studies, the dynamic nature of L2 motivation, rooted in the Complex Dynamic Systems Theory by Larsen-Freeman (2015), has drawn

attention. According to Muir and Dörnyei (2013), “a dynamic system is descriptive simply of a context which has multiple factors in play, each influencing those surrounding them and thereby causing multiple interferences.” (p. 369). Hence, it has been acknowledged in the field that language learning motivation cannot be explained through linear cause-and-effect relationships, but the construct is more sophisticated than this simple process, and many factors are in interplay. The complex dynamic systems perspective has emerged from that understanding, and the chaotic and complicated nature of L2 motivation has been widely recognized. However, the relevance of DMC to the complexity perspective derives from its structured and regulatory nature. In the middle of that complexity, the DMC construct provides a pathway for motivated action, and it provides predictability. In DMC experiences, it is clear that the process starts with a trigger, a strong vision of the end goal leads the learners to the target through structural patterns such as sub-goals and routines, and finally, the goal is attained. In that sense, DMC evolves complex and unpredictable motivation construct into a researchable one (Dörnyei et al., 2014).

### **The Wane of DMC**

Unfortunately, the DMC process is not everlasting, and its closure leads to great changes in learners' lives. First, when the current stops carrying the individual forward, conscious effort and concentration are needed to make progress. Moreover, the transition from the DMC disposition to effortful behavior may be experienced abruptly or gradually by different people, and after that turning point, the learners do not function in “hyperdrive” anymore, but they continue at their “normal speed” (Dörnyei et al., 2016, p. 123). The protective shield of visionary single-mindedness, which refers to focusing on the activities leading to the end goal without any distractions or alternatives, is also not active anymore (Dörnyei et al., 2016).

The closure of DMC generates various feelings on the part of the learners. Positive emotions such as satisfaction, happiness, and relief of not being obliged to pursue

demanding tasks may arise, or negative ones such as tiredness, fatigue, recognition of sacrifices throughout the process, and a sense of loss may be experienced. Contrary to common belief, the feelings of tiredness and fatigue do not originate from the cognitive load of the activities; instead, persistence in maintaining the activities that are not enjoyed but endured for the sake of attaining the goal causes them. These negative emotions do not suddenly arise; they gradually grow and peak up at the end which is the time of the closure. It is important herein to control the negative feelings not to leave long-term adverse marks for the future.

According to Dörnyei et al. (2016), the dissipation of the current does not always correspond to the end of the learning process; in many cases, individuals need to pursue learning to improve themselves after the DMC period. It may even be experienced before attaining the visualized end goal or the end goal may be altered due to various reasons. Teachers, parents, or significant others in the lives of the learners have substantial roles throughout that stage. In L2 classes, teachers' support and guidance during the transition from the DMC disposition to normal functioning help learners smoothly transfer their energy. Teachers can encourage learners to set further goals to improve themselves at sustainable levels. If the closure of the intense current has been experienced without reaching the final goal, rather than abandoning it completely, adopting it to a more manageable state may be suggested. In other words, the vision of the end goal may be revised to bring it to a sustainable level. It should be considered herein that if the failure is derived from expecting to accomplish the goal too soon with too much additional gain, then reducing the expectations to more realistic levels and creating a new vision of the new goal would be an acceptable solution (Polivy & Herman, 2002). Furthermore, suggesting the learners who have just come out of DMC pursue at least some behavioral routines of the process help them recall the DMC process as something positive in the long run.

Consequently, closure of the DMC is a hard period, and the assistance provided to the learners at that stage is quite substantial for the learners' future motivated behavior.

### **An Overview of Group DMC**

Investigating the role of DMC in language education, Henry et al. (2015) state that besides individual DMC experiences, it is also possible to create it at the group level. According to them, a class or even a school of students can be caught up in that current under optimal conditions. Comparing individual and group DMC, both similarities and differences can be recognized between them. While both are intense and powerful states of energy to act in a motivated way (Dörnyei et al., 2016), group DMCs manifests themselves as intensive group projects in a classroom context. Initiating a group project and guiding the learners to design and apply it generates high levels of commitment for the learners, provided the topic of the project appeals to them in terms of its authenticity, level of challenge, and the necessary conditions. In other words, the goal of the project should relate to the current selves and lives of the learners, the difficulty level should be balanced for them to be able to handle, and they should have access to the materials and the environment for successful completion of it.

As previously described, individual DMC requires a clear vision of a highly valued end goal, and then a trigger is essential to initiate the process (Dörnyei et al., 2016). In group-level DMC, though, the end goal and the trigger are not two distinct components; they function together to launch the process. To clarify, the availability of a desirable goal that is inspiring, appealing, and relevant to the group of learners is at the same time the trigger of the current. Nevertheless, contrary to individual DMC that is activated right after the trigger, group DMC needs a longer period to energize the motivated action since it takes more time to visualize the goal as a whole group.

In addition to the features of the goal, the environmental conditions of the project are also key factors in group-level DMC (Henry et al., 2015). For a successful group DMC

process, a positive and supportive rapport between students and the teacher, affirmative feedback, and finally a mature group to overcome the challenges in harmony are some prerequisites (Zarrinabadi & Khajeh, 2021). Concrete outcomes and external recognition are also significant issues in group-level DMC. For the group to feel full ownership of the project and exert stronger commitment to it, they need to focus on an observable outcome such as presenting the products of the project. Exhibitions, end-of-project shows, or publications of some materials that will be recognized and appreciated by significant people, for example, their parents, peers, or school administration, function to increase the intensity of motivated behavior.

The salient structure of individual DMC can be observed in group-level DMC as well in that group DMC also includes sub-goals enabling progress checks in terms of both L2 learning and the content of the project (Dörnyei et al., 2016). Moreover, they start with a clear goal defined and visualized at the beginning, and the end is explicit. Positive emotionality is also a core feature of group-level DMC though it appears in different means from individual one. Positive emotions in group DMC are not dependent on the self-concordant goals, but rather on the “social well-being” (Dörnyei et al., 2016, p. 157) which is experienced thanks to completing the project concertedly. Emotional and cognitive contagion referring to being influenced by the perceptions and feelings of others serves a significant function in group projects (Henry, 2020; Zarrinabadi & Khodarahmi, 2021).

The dissolution of group DMC is the final aspect that is worth attention in this brief overview. As in individual DMC, it is crucial in group-level DMC as well to end the process with constructive emotions. An emphasis on the success of the process and the product and the skills gained throughout the whole project should be targeted at that stage. Thus, the group can leave with positive feelings such as satisfaction, pleasure, and self-confidence, they are encouraged for further projects, and they feel motivated to pursue

the learning procedure using their newly gained abilities and knowledge (Dörnyei et al., 2016).

### **Previous Research on DMC**

In this section, previous research on Directed Motivational Currents are introduced focusing on the initial and the contemporary research trends.

The initial studies by Dörnyei and his companions (Dörnyei et al., 2015; Muir & Dörnyei, 2013) analyzed the structure of DMC theoretically. Then, they have been followed by new lines of research with different foci to comprehend the construct in more detail. A small number of them were dedicated to revealing the validity of its core features with empirical data for distinct cases (Henry et al., 2015; Ibrahim, 2016; Safdari & Maftoon, 2017; Zarrinabadi & Tavakoli, 2017) and they affirmed the construct in their cases with all components validated in that unique experience. Besides, the affective features of DMC were investigated (Ibrahim, 2016, 2020), and the motivational and affective fluctuations in DMC were scrutinized looking into cases in the Turkish context with different motivational profiles (Sak, 2020; Selçuk & Erten, 2017). The optimum conditions and triggering parameters initiating the current were other significant concerns for researchers (Başöz & Gümüş, 2022; Dastgahian & Ghonsooly, 2018; Ibrahim, 2017; Xodabande, Babaii, 2021; Zarrinabadi & Khodarahmi 2021). In addition, contextual factors impacting the DMC structure in instructed settings were investigated by Sak (2019) revealing classroom atmosphere and exam pressure as the crucial factors with strong influences on DMC. Another research line appeared looking into the socio-demographic influences on DMC (Ghanizadeh & Jahedizadeh, 2017; Muir, 2016).

Although DMC was introduced as a magical construct ensuring long-term sustainment of motivated action accompanied by positive emotions all the time, recent studies unveiling the negative effects of this intense motivational current on the emotional well-being of the learners also appeared in the literature (Jahedizadeh & Al-Hoorie, 2021;

Sak & Gürbüz, 2022). Lastly, conditions to ensure the sustainability of DMC were examined by Pietluch (2022) displaying that learner agency and keeping the sub-goals alive were two primary parameters to ensure the current in cases of mental, emotional, and physical exhaustion.

Intervention studies on group-level DMC or shared sustained flow was quite prevalent in the field since the introduction of the construct. Initially, Watkins (2016) focused on a specially designed curriculum to stimulate group DMC and Ibrahim and Al-Hoorie (2019) followed them by looking into the projects that might create the prime conditions to encourage group-level DMC. Ibrahim and Al-Hoorie (2019), and Zarrinabadi and Khajeh (2021) investigated how group DMC could be triggered and maintained as well as the role of group dynamics in the successful completion of collaborative projects. Last of all, Garcia-Pinar (2022) and Pietluch (2022) displayed in empirical studies that group projects with clear instructions and also personally rewarding target goals would initiate DMC successfully, and promoting learner efficacy through specific interventions included in the curriculum would support it.

The final line of studies to be reported in this section is the interaction between DMC and ID factors. Zarrinabadi et al. (2019) initiated a new research trend looking into the relationship between DMC experiences and individual difference factors, specifically autonomy, willingness to communicate (WTC), self-confidence, and self-concept. Analysis of their qualitative data showed that experiencing the current exerted a positive impact on the learners' autonomy, WTC, self-confidence, and self-concept. Sak (2021) followed the agenda investigating DMC in relation to the five-factor model (FFM) personality traits and Jahedizadeh, Ghonsooly, and Ghanizadeh (2021) focused on DMC in relation to the following ID factors: personal best, buoyancy, evaluation apprehension, and academic achievement. The current study is distinctive in that it aims to explain variations in DMC in relation to ID factors that may regulate its power and sustainment. It aims to make a unique contribution to the field with a focus on factors that are different



from the previous studies. The particularly chosen ID characteristics have great potential to be highly related to DMC due to the structure of the construct. The interactions reported in the literature between the specified ID factors and L2 motivation are also stimulating to investigate these factors more deeply in relation to DMC.

### ***Critical Perspective on DMC***

Similar to the critical standpoint of Jahedizadeh and Al-Hoorie (2021) and Sak and Gürbüz (2022) about taking positive emotionality for granted in the ongoing motivation of a DMC learner, Peng and Phakiti (2022) stated several concerns to be reconsidered and further analyzed. First of all, they stated that there is a need for a more robust description and explanation of the DMC structure. It is suggested to be “multi-faceted and dynamic in nature” (Peng & Phakiti, 2022, p. 18) and it has roots in several theories in the field. Thus, for example, it is hard to distinguish between the roles of progress checks as a hallmark of DMC or as a meta-cognitive self-regulation strategy. In addition, they assert that investment should be among the core components of DMC since the current requires a personal investment in terms of time, energy, and psychological state. Thirdly, defining DMC as an unconscious process might be faulty considering its hallmarks, thus further investigation is of paramount significance regarding the structure of the construct. Lastly, they suggest that how much effect DMC has on improving language skills is unclear and the linkages between DMC and language learning achievement are deficient.

The review presented above suggests that though various lines of research have been initiated in relation to the DMC construct, they are still in their infancy and further investigations are fundamental to extend the literature.

### **Implications for Practice**

DMC experience with an intense level of energy to reach a significant end goal caters for great potential implications for individual and in-group language education. The explicit structure of the current and its long-term success were defined as the key factors

for its practicality by Dörnyei et al. (2015). This section covers the practical implications of DMC focusing on how to promote the effectiveness of each component besides recommendations on fostering group DMC.

Language classes have been described as great environments to launch and sustain DMC in a well-structured way (Henry et al., 2015), and teachers have significant roles in these settings. First, by introducing personally rewarding and well-tailored class goals that are acknowledged by all members, they can foster goal/vision-orientedness of learners. They may also draw attention to deadlines for sub-goals and provide regular feedback. Zarrinabadi and Soleimani (2022) revealed the significance of positive and negative feedback on promoting and sustaining DMC by increasing the learners' goal orientation, self-efficacy beliefs, and goal persistence as well as decreasing the distance between their present and future goal states. Using contracts to ensure adherence to the goals can also be one way of promoting goal commitment. In addition, increasing the visionary capacity of the learners brings out considerable benefits in terms of initiating and sustaining motivated behavior. To be able to do that, Dörnyei and Kubanyiova (2014) suggest the following six stages: creating the vision; strengthening the vision; substantiating the vision which requires controlling the reality and accessibility of it; transforming the vision into action; keeping the vision alive; and counterbalancing the vision which involves imagination of the failure to stay away from it. Besides setting goals and creating visions of them, encouraging learners to think about how to relate the goals to their daily lives, and enabling them to be autonomous and take full ownership of the process are some strategies which may promote long-term commitment to the goal.

The salient structure of DMC and positive emotionality in it also suggest some implications for longer-term DMC experiences (Dörnyei et al., 2016). To start with the structure, learners need to be guided to create study routines and adhere to them as much as possible. Setting shorter-term goals, which are proximal sub-goals, should also be encouraged to show the learners their progress and decrease their feelings of anxiety.

Thus, the distal goal should be divided into sub-steps to be followed one by one. To promote positive emotional states of the learners, learning situations, materials, and goals should be associated with their interests and desires (Dörnyei et al., 2016). Designing a learning environment allowing them to act by their transportable identity, which means behaving totally as themselves, is crucial to create the current. Finally, students should be guided to create their ideal L2 self and their vision of it for eudaimonic well-being and authenticity.

Group-level DMC can be regarded as the richest construct to suggest practical implications for long-term and intense motivational currents in language classes. Considering that languages are primarily learned in classes interacting with a group of people, the pedagogical benefits of promoting the creation and maintenance of group DMC cannot be ignored. Shernoff and Csikszentmihalyi (2009) suggest eight practical tips to promote group flow; however, they are also suggested to apply for group DMC by Dörnyei et al. (2016). These are listed as challenging learners at appropriate levels, making assignments related to their lives, encouraging autonomy, setting explicit goals and guiding on the journey to attain these goals, building positive environments in terms of personal relationships, promoting intense levels of commitment, stimulating hands-on activities, and finally enabling learners to have fun. Garcia-Pinar (2022) and Pietluch (2021) also displayed in empirical studies that group projects with clear instructions and also personally fulfilling end goals would start DMC, and promoting learner efficacy through specific interventions included in the curriculum would support it. In addition, Ibrahim and Al-Hoorie (2018, p.51) revealed three main conditions facilitating the group-level DMC: “forming a group identity, attaching personal value, and providing partial autonomy”.

Similar to the practical tips by Shernoff and Csikszentmihalyi (2009), Dörnyei et al. (2016) talk about seven frameworks that provide substantial practical implications in group-level DMC. These frameworks are named “all eyes on the final product”, “step by

step”, “the BIG issue”, “that’s me!”, “detective work”, “story sequels”, and “study abroad”, all of which can be used to promote strong DMC currents in long term in classroom contexts (Dörnyei et al., 2016, p. 177). Each of these frameworks has a “signature component” (p. 176) which leads to sustained motivated behavior. To summarize the frameworks and their signature components, “all eyes on the final project” is related to the end goal and the strong vision of it to create the energy for the project. “Step by step” is concerned with the energy fueled by the contingent path. “The BIG issue” uses a thought-provoking question that creates reactions to energize action. “That’s me!” is dependent on a sense of commitment among the learners and also between the project and the learners. “Detective work” uses a problem state which requires long periods of motivated behavior to solve it. “Story sequels” makes use of interesting and exciting stories by sharing a small part of them every day with learners, thus creating energy for long-term engagement. Lastly, “study abroad” is related to the vision of a distal goal of going abroad which launches the energy. Since all of these frameworks are based on some components of DMC but not on all of them, they should not be treated as single entities; collaborative use of them should be preferred for greater pedagogical benefits.

Finally, Dörnyei et al. (2014) suggest some applications for language classrooms based on the components of DMC and they could be categorized as lesson, term, and course-level applications. Lesson-level applications are related to a single class hour, and the use of tasks as learning contexts is the primary focus. Dörnyei et al. (2014) state that tasks include numerous components of DMC experiences. They have clear starting points and ends, effective tasks are well-structured including many steps which serve as proximal sub-goals to show progress, and learners can feel autonomous and act as the owner of the process. Thus, it is indispensable for a well-planned use of tasks to energize the learners to be caught up in the current of motivated behavior. Term-level applications, on the other side, cover the use of project works that is more comprehensive and longer-term than the use of tasks. Similar to tasks, project works also share common features

with DMC. However, there is special attention on the assessment criteria of project works. It is suggested that teachers should be precise in their evaluation criteria of the project, and learners should be informed about them to reach the end goal without divergences. Lastly, course-level applications are beyond a lesson hour or term since it is a more distant-oriented construct. Going on a school trip after completing the course successfully, or studying at university and taking the language course there again launch a DMC process. However, they have less potential than proximal goals to energize the learners for motivated behavior, and they require stronger visions.

Following the literature reported so far on L2 motivation, DMC, and language learning, the upcoming sections will cover self-regulation and the other related ID factors specified in this study.

### **Self-regulation and Language Learning**

The last few decades of educational psychology have witnessed great increases in the number of studies on individual difference factors such as motivation, self-efficacy, self-concept, self-esteem, and self-regulation (e.g., Clement, Dornyei & Noels, 1994; Lau, Yeung, Jin & Low, 1999; Li & Wang, 2010; Noels, Pelletier, Cle´ment & Vallerand, 2000; Oxford, 2011; Tremblay & Gardner, 1995). The focus of this section is on self-regulation which is one of the main factors to move from dependent to autonomous and lifelong learners (Pintrich & De Groot, 1990; Schunk & Zimmerman, 1994).

Self-regulation is one of the core notions in Bandura's Social Learning Theory (1965) and it has been described in various ways by researchers. One of the most commonly known definitions has been provided by Zimmerman (2000, p.14) explaining it as "self-generated thoughts, feelings, and actions that are planned and cyclically adapted to the attainment of personal goals". Zimmerman (1986, 1989) characterizes self-regulated learners as behaviorally, motivationally, and meta-cognitively active and dynamic individuals in the learning process. He also states that to be identified as self-

regulated, learners need to use some strategies to reach their academic goals. In Bandura's (1986) triadic definition, self-regulation refers to the reciprocal relations between personal, behavioral, and environmental factors, and he specifically emphasizes the role of environmental factors which has not been mentioned enough. According to Pintrich (2000, p. 453), self-regulation refers to "an active and constructive process through which learners establish objectives, monitor, regulate, and control their cognition, motivation, and behavior guided by their goals and the contextual features of the environment". Then in 2011, Zimmerman and Schunk defined self-regulation as "the processes whereby learners personally activate and sustain cognitions, affects, and behaviors that are systematically oriented toward the attainment of personal goals" (p.11). In a broader sense, the three main components of self-regulation have been identified as metacognition, strategy use, and motivation, which guide the learning process (Butler & Winne, 1995; Perry, Phillips, & Hutchinson, 2006; Zimmerman, 1990; Boekaerts & Corno, 2005). Accordingly, self-regulation is an active and dynamic process in which learners create their own goals; they observe, regulate and keep control of their cognitive activities, behaviors, and motivation to reach these goals; and besides all, they organize the environmental effects during that process (Pintrich, 2004; Schunk, 2005). The most commonly used self-regulated strategies investigated in many studies can be listed as goal setting, self-monitoring and keeping records, rehearsing and memorizing, organizing and transforming, environmental structuring, and self-evaluating (Butler & Winne, 1995; Baird, 1983; Schraw & Moshman, 1995; Winne & Hadwin, 1998).

Effective self-regulated learners have various characteristics that distinguish them from others. As reported by Zimmerman and Schunk (2008, p.1), they "set better learning goals, implement more effective learning strategies, monitor and assess their progress better, establish a more productive environment for learning, seek assistance more often when it is needed, expend effort and persist better, and set more effective new goals when present ones are completed". According to Clearly and Zimmerman, (2004), they

can handle learning situations self-confidently and cautiously, they are proactive in setting goals, and they plan effective roadmaps to reach goals. Since they take an active role in the learning process and control their learning situations, they become autonomous and lifelong learners, which helps them be more successful in their academic life and career (Ruban & Reis, 2006).

### ***Metacognition and Self-regulation***

Studies on metacognition date back to the 1970s when Flavell first proposed it in the field of educational psychology. It has been defined by him as “one’s knowledge concerning one’s own cognitive processes and products or anything related to them” (1976, p. 232). Besides psychology, it has been a significant construct in education as well and is described as higher-order thinking that functions to monitor the cognitive processes of learning (Livingston, 1997). In short, it is the process of “thinking about thinking” (Öz, 2005, p. 147).

Because of their corresponding core constructs, metacognition, self-regulation and self-regulated learning (SRL) have been used interchangeably leading to unclarities in the field. Dinsmore, Alexander, and Laughlin (2008) state that they are not synonyms, though, and Zeidner, Boekaerts, and Pintrich (2000) articulate the need for a clear identification of their diverging features. To clarify the distinction between them, self-regulation has been defined based on the effects of environmental factors on regulated behavior; metacognition has been explained in terms of its focus on the regulation of cognitive processes; and finally, self-regulated learning has been related to academic learning contexts (Dinsmore et al., 2008; Lajoie, 2008).

Awareness and management have been presented as the essence of metacognition in the literature (Schraw, Crippen, and Hartley, 2006). While metacognitive awareness refers to the knowledge learners have about learning, metacognitive management requires applying metacognitive strategies such as planning, controlling,

monitoring, or evaluating during the learning process. Metacognitive learners are greatly aware of their learning and can regulate the learning situation on their own. They use the most effective metacognitive strategies to do that, and they are successful self-regulators (Raofi, Chan, Mukundan, & Rashid, 2013).

Oxford (1990) argues that metacognitive strategies are highly significant for successful learning outcomes. Several studies also support these findings; for example, Raofi et.al (2013) reported six research studies about the interaction between metacognitive strategy use and achievement. Except for Yau (2009), a positive relationship between metacognition and language learning achievement has been displayed in other studies (e.g. Bruen, 2001; Phakiti, 2003; Pishghadam & Khajavy, 2013; Schoonen, van Gelderen, Stoel, Hulstijn, & Glopper, 2011; van Gelderen, Schoonen, De Glopper, Hulstijn, Simis, Snellings, and Stevenson, 2004). Wenden (1987) also emphasized the role of metacognition in language learning achievement. In addition, an indirect relationship between metacognition and L2 achievement has been revealed via the mediation of cognition and cognitive strategies (Flavell, 1979; Purpura, 1997). Considering the interaction between them, it can be suggested that learners' success can be influenced by training them on how to improve their metacognitive skills (Raofi et.al, 2013). As reported by Victori and Lockhart (1995), the final goal of metacognition training is to create autonomous, self-directed, and self-regulated learners, and it can only be achieved with the support of teachers and educators. Haukås (2018) specifies that teachers are willing to spend time on metacognitive interventions; however, they have limited or no information and skills to achieve that. Therefore, teacher education programs are suggested to include sessions on metacognitive awareness and strategies. In that way, pre-service teachers can enhance their knowledge and skills to provide these interventions to their future students (Freeman & Johnson, 1998; Freeman, 2001). Moreover, Pajares (1993) recommends that educators should create learning environments encouraging their students to think meta-cognitively. Teachers are



suggested to accomplish that by modeling how to do it on various occasions. Finally, in line with Graham and Macaro's (2008) suggestions, rather than one-shot instructions, shorter periods of regular interventions might increase the effectiveness of programs on the learners' language skills and L2 motivation.

### **Historical and Theoretical Background of Self-regulation and Self-regulated Learning**

Self-regulated learning (SRL) is a construct derived from learning strategies. The studies on language learning strategies came into prominence in the 1970s aiming at identifying good language learning strategies used by successful learners and then teaching them to less successful ones to improve their skills and abilities as well (Naiman, 1978; Rubin, 1975). Since then, various studies have been conducted and definitions have been offered for learning strategies, the most widely accepted of which has been provided by Oxford (1990) stating that learning strategies are "specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, and more transferrable to new situations" (p. 8). Although learning strategies have been widely investigated for decades, a consensus on their definition and fundamental constructs has not been reached (Salehi & Jafari, 2015). Thus, in 2005, Dörnyei suggested using SRL instead of learning strategies to clarify the redundancy of explanations. Dörnyei (2005) contended that with the new term of SRL, the emphasis would shift from product to process of learning, and a more comprehensive understanding could be initiated. Moreover, SRL would reflect the dynamic nature of learning better than learning strategies. Finally, it would be an umbrella term to include learning strategies, autonomy, motivation, and many other related constructs. With all these considerations, learning strategies have started to lose their popularity in educational psychology, and more attention has been focused on SRL (Patten & Benati, 2010).

### ***Theories of Self-regulated Learning***

Theories and studies on self-regulated academic learning date back to the mid-1980s when research primarily focused on clarifying how some learners could become academically successful while others could not (Zimmerman & Schunk, 2013). Therefore, various theorists have explained SRL from different perspectives. In that section, five main theoretical views of SRL will be covered.

First of all, operant views of SRL suggest that it is initiated and supported by the external rewards available in the environment. Reinforcement and stimuli-response relationships are key terms in that view and the presence of self-regulation depends on effective modeling and external facilitation. Contrary to operants who assign a significant role to environmental influences, phenomenological views of SRL assert the importance of self-awareness, self-perceptions, and self-concept of the learners. According to these theorists, the end goal in SRL is self-actualization, and the psychological and affective states of learners are influential during the process. Therefore, to lead to better performances and finally achievement, the learners' self-perceptions need to be fostered positively. Furthermore, the Vygotskian view of SRL emphasizes the role of egocentric and inner speech since they help learners control their behavior and bring the learning process to a conscious level. The cognitive constructivist perspective regards mainly cognitive processes and metacognitive monitoring. According to them, creating schemas through accommodation and assimilation, and constructing personal strategies and theories are key processes of SRL. Piagetian constructivists argue that as learners move from childhood to adulthood, they can shift from other-initiated goals and ideals to self-initiated ones and engage in self-constructed self-regulatory actions.

The last and most potent theoretical perspective of SRL is the social cognitive perspective. Bandura (1986), representing it, defines SRL based on the reciprocal interactions between personal, behavioral, and environmental factors. Personal factors refer to self-efficacy, knowledge, goals, affective situations, and metacognition. Behavioral procedures are self-observation, self-reaction, and self-judgment, while environmental

factors include modeling and verbal persuasion. According to that perspective, “SRL occurs to the degree that a student can use personal (e.g. self-) processes to strategically regulate behavior and the immediate learning environment” (Zimmerman, 1989). Bandura (1977) put great emphasis on the role of self-efficacy in that process. Self-efficacy beliefs of the learners have been affirmed to influence their outcome expectations, activity choices, persistence in activities, and finally achievement (Schunk, 1995). According to social cognitivism, modeling is also a remarkably influential key factor in that self-regulated behaviors improve moving from social or environmental sources to self-sources by learners’ act of observing the models in the environment, emulating their actions, self-controlling their behaviors based on these observations, and finally self-regulating their learning. Concentrating on the observable nature of learning, the social cognitive view of self-regulation gives educators the chance of guiding SRL processes.

Theories of SRL tried to explain how individual learners motivate, change, and keep their specific learning behaviors on their own or in social settings and learning contexts (Zimmerman, 1986). They all assert that learners need to be proactive in the process of SRL and academic development. Finally, as stated by Zimmerman and Schunk (2001), the existence of numerous theories on it can provide various guidelines for educators to promote more self-regulated and autonomous learning situations.

### ***Models of Self-regulated Learning***

The issue of definitional complexity on self-regulation and different perspectives suggested by various theorists led to the emergence of several SRL models each emphasizing different processes or components of it. As stated by Habók and Magyar (2018), the models integrate behavioral, cognitive, metacognitive, motivational, and emotional aspects of learning, and refer to significant variables such as self-efficacy, learner’s beliefs, cognitive and metacognitive strategies, and motivational and affective factors. In that section, Zimmerman’s model with socio-cognitive perspective, Pintrich’s model emphasizing the role of motivation in SRL, Winne and Hadwin’s model with

metacognitive perspective, and finally Boekaerts's model on goals and the role of emotions will be covered.

To yield a comprehensive understanding of the structures of self-regulation processes, Zimmerman (2000) proposed a cyclical model of phases based on social-cognitive theory. According to the model, self-regulation starts in the forethought phase which includes setting goals and making plans to achieve them. Self-efficacy, outcome expectancies, and goal orientation, which are all parts of self-motivation beliefs, are also included in that phase affecting the whole process. The forethought phase can be considered as the preparation for taking action. The performance phase is when learners start putting effort into the progress, and it is composed of self-control and self-observation processes. The self-control process guides learning and it covers task and volition strategies, self-instruction, imagery, time management, and environmental structuring. Metacognitive monitoring of performances and self-recording of progress are two components of self-observation. The third phase of Zimmerman's model is self-reflection which refers to critically reflecting on learning or performance and making some changes in line with the results. The two processes involved in this phase are self-judgments and self-reactions. Forethought, performance, and self-reflection phases are in a cyclical interaction. Although self-reflection may seem like the last stage of the model it triggers the forethought phase again to continue further learning experiences.

Pintrich (2000) has put forward another model to explain SRL processes according to which SRL consists of four main stages that are (1) forethought, planning, and activation, (2) monitoring, (3) control, and (4) reaction and reflection. Each stage consists of four constructs that are cognition, motivation/affect, behavior, and context. Based on the combinations of these four stages and constructs, learners can create a vast number of SRL processes such as "prior content knowledge activation, efficacy judgments, self-observations of behavior" (Panadero, 2017, p. 13). In addition, Pintrich is among the first researchers who emphasize the role of motivation in self-regulation, and a significant

contribution of that model to educational psychology has been the construction of the Motivated SRL Questionnaire (MSLQ) by Pintrich, Smith, Garcia, and McKeachie (1993). It is composed of a motivation section and learning strategies section, 81 items in total. MSLQ is among the most commonly used instruments for SRL, which shows the magnitude of Pintrich's SRL model.

Winne and Hadwin (1998) designed an SRL model based on the metacognitive perspective, and students are identified as active learners monitoring their learning processes via cognitive and metacognitive strategies. According to that model, SRL is composed of four processes. The first step is task definition which refers to the learners' comprehension of the task features and requirements. Then, during the goal-setting and planning stage, learners set their personal goals regarding the task and create an action plan for it. The enacting study tactics and strategies stage is the time for taking action in line with the plan headed to the goal. The final stage, namely meta-cognitive adaptations in the study process, is concerned with learners' long-term decisions about studying such as reconsidering their beliefs, motivation, and strategies for the prospective learning situations. These processes have been suggested not to function linearly but flexibly based on the feedback of each step to the others. The most salient feature of the model is the emphasis on the role of learners in planning and monitoring the learning situation to perform successfully on the way to the end goal (Winne & Hadwin, 1998).

The final SRL model to be mentioned in that section is Boekaerts's model on goals and the role of emotions (Boekaerts, 1991, 2011). Boekaerts (2011) puts forward three main objectives of SRL which are improving learners' skills and knowledge, avoiding threats to their identity to keep their emotional state on the positive side, and finally pursuing the learning activities but at the same time keeping their emotional state positive. The significance of emotional well-being during the self-regulation processes is highly emphasized in this model. Comparisons of the four models reported above revealed that Zimmerman's and Pintrich's models outperformed the others in terms of popularity. The

reasons have been explained by Dignath, Buettner, and Langfeldt (2008) stating that they are better structured and therefore easier to comprehend and use. Their stages could be clearly separated from each other and also sub-processes of the stages are clear which makes them more comprehensible (Dignath et al., 2008).

The presence of different models for SRL leads to some educational implications for language learners, teachers/educators, or the other stakeholders involved in the education process (Panadero, 2017). First of all, considering that SRL fosters achievement (Dignath et al., 2008), it is significant for teachers to be informed about different theories and models of SRL to aid their students to get the maximum benefit from them. Teachers also need to be trained on how to promote SRL in different proficiency and age levels because some models work better in lower grades, while others work more effectively with upper ones. Therefore, teachers need to know how to organize their interventions in line with those criteria. Finally, creating a learning environment that allows students to be free in regulating their learning processes would promote mastery.

### **How to Measure Self-regulation and Self-regulated Learning**

Before resolving how to measure self-regulation, early researchers' main concern was how to define that construct. While some considered it as an aptitude and suggested more stable ways of measurement, others regarded it as an event and focused on context-dependent measurement (Collett, 2014). Then a consensus on the dual nature of self-regulation has been achieved, and self-regulation has been described both as dynamic and situation-dependent. Thus, measurement tools were focused on both aspects of it (Winne & Perry, 2000; Zeidner, Boekaerts & Pintrich, 2000). With that perspective in mind, it has been suggested by researchers that tools need to be more sophisticated, and rather than only qualitative or quantitative methods, triangulation via mixed-method research designs should be preferred (Collett, 2014). Woodrow (2005) also added that rather than quantitative instruments using Likert-type scales, more emphasis

should be given to in-depth qualitative analysis. Finally, Zeidner et al. (2000) recommended longitudinal studies instead of cross-sectional ones, which seems substantially reasonable. Since SRL is a dynamic construct (Larsen-Freeman & Cameron, 2008), longitudinal studies could reveal its nature more explicitly.

Although a heavy reliance on self-report questionnaires was in question to measure SRL, Boekaerts and Corno (2005) put forward seven other ways of estimating it which are observations, interviews, think-aloud protocols, examining trace evidence, situational manipulations, recording of strategies on-task, and diaries. Rather than choosing one among them, they advised the researchers to implement more than one tool to triangulate their findings and overcome the potential disadvantages of each method. In addition, Zimmerman (2011) claimed that instead of self-report methods which do not refer to the moment of the self-regulated action, the tools should trace the self-regulated behavior and be directly related to the time of the self-regulation event. Therefore, observations, recording of strategies “on task”, or think-aloud protocols could be appropriate ways of measurement.

During the past few decades, many self-report instruments have been developed to measure self-regulated strategies (e.g. Carey, Neal, & Collins, 2004; De la Fuente, Zapata, Martinez-Vicente, Sander, & Cardelle-Elawar, 2015; Habok & Magyar, 2018; Köksal & Dündar, 2017; Salehi & Jafari, 2015; Seker, 2016; Tseng, Dörnyei, & Schmidt, 2006). However, none of them affected the field more than the Motivated SRL Questionnaire (MSLQ) by Pintrich et al. (1993). MSLQ is composed of a motivation section and learning strategies section with 15 subscales in total. While the motivation section consists of 31 items, the learning strategies part includes 50 items. The reason for its immense popularity derives from the integration of both motivation and SRL within an instrument that successfully reflects the core constructs of learning.

## **Studies on Self-regulation in L2 learning**

Considering that self-regulation is a crucial component for sustaining motivation and self-confidence, especially in cases of difficulties, its role in L2 learning contexts cannot be denied (Liu & Lee, 2015). Language learning is a demanding journey requiring a vast amount of energy, time, effort, persistence, and motivation. Students need to be engaged in the learning process both inside and outside of class via curricular activities, extracurricular activities, and self-study materials. That is the reason why they need independence, autonomy, and self-regulation so that they can create their own goals, design their roadmaps to attain these goals, implement their plans actively, and reflect and react to the process (Zimmerman, 1990; Zimmerman, 2000). As stated by Boekaerts (1997), when learners exert themselves to other-initiated goals, they feel imposed upon and tend to react adversely. On the other side, in cases of self-initiated personal goals, learners plan the process according to their own preferences, and they are inclined to put in more volitional effort. Thus, learners need encouragement to set their own goals, improve their abilities to self-regulate and implement the processes effectively (Oxford, 1990; Pintrich & De Groot, 1990). Teachers have a significant role hereby to help learners perform effectively, thus they can reach mastery in all skills of L2 such as reading (Ehrman, 1996), speaking (Ehrman, 1996), vocabulary (Rasekh & Ranjbar, 2003) or writing (Andrade & Evans, 2013).

The study by Seker (2016) in the Turkish EFL context at a state university revealed that the majority of language instructors defined successful language learners with the skills of studying independently and consciously on a regular basis. These instructors also stated that they were aware of the term self-regulation. On the contrary, when asked whether they spent any time teaching their students how to be independent or self-regulated language learners, most of them answered negatively and explained that the reason was the overloaded curriculum. Therefore, they could not think of integrating SRL strategies into their classes. As concluded in many research studies, self-regulated



learning strategies can be taught in classes (Oxford, 2011, Zimmerman, 2000). To do so, teacher training programs should inform language teachers on how to teach these skills and knowledge in their classes so that they can create independent, autonomous, self-regulated, and lifelong language learners (Seker, 2016).

### **The Relationship between Self-regulation, Motivation, and Achievement**

Zimmerman (1998) defines self-regulation as “the control of one’s present conduct based on motives related to a subsequent goal or ideal that an individual has set for him or herself” (p. 1). Considering the basic components emphasized in that definition, which are future self-guides, ideals, and goals, it appears that motivation and self-regulation are two integral constructs. Zimmerman and Schunk (2008) have described good self-regulators as people setting healthier goals, resorting to more operational strategies, self-evaluating, creating an appropriate learning environment, asking for help more frequently, and putting greater lengths of effort into the learning processes. Clearly, according to them, motivation is a precursor to starting, guiding, and maintaining that effort for self-regulation. In addition, Kormos and Csizer (2014) explained that motivation to attain goals is the initiator of self-regulated action, thus motivational factors such as future goals, ideals, and learners’ beliefs (e.g. self-efficacy beliefs) are prerequisites for SRL behavior. Ushioda (1996, 2003, 2006) also agrees with them asserting that intrinsically motivated learners take responsibility for their learning process, and thus succeed in being effective self-regulated learners.

While motivation seems to be a prerequisite for self-regulation, Vidal-Abarca, Mana, and Gil (2010) suggest that self-regulation is, reciprocally, effective in increasing students' motivation. Bembenuddy (2011) provides support stating that self-regulation enhances learners’ motivation as well as their self-efficacy. Furthermore, according to Zimmerman and Martinez-Pons (1988), self-regulated learners are more proficient in using metacognitive, motivational, and behavioral strategies. Similarly, several studies

promote the same view suggesting that self-regulation is a significant factor in the learning process, and enhancing its role leads to superior performances and outcomes (e.g. Cleary & Zimmerman, 2004; McCombs, 1989; Tuckman, 2003).

In addition to the abovementioned perspectives on the connections between self-regulation and motivation, a mutual interaction between them has also been identified in the literature, and Zimmerman and Schunk (2008) define it as a “chicken-and-egg dilemma” (p.4). Zimmerman (2000) presents that when students have high levels of motivation, they put effort and time into self-regulating their behavior and learning processes, and when they are self-regulated and successful in doing that, they get more and more motivated to sustain the learning process. Pintrich, Roeser, and De Groot (1994) also discovered similar results proposing that high levels of motivation and self-regulation have a multifaceted mutual interaction.

Concerning the relationships between SRL, motivation, and academic achievement, solid connections have been identified in the literature (Chapman & Tunmer, 1995; Pokay & Blumenfeld, 1990; Schunk, 1996; Schunk & Swartz, 1993; Zimmerman & Martinez-Pons, 1990). As explained by Mahmoodi, Kalantari, and Ghaslani (2014), “the idea of motivation and self-regulation has cast light on why some students succeed in controlling their English learning while others do not” (p. 1063). Pintrich (2000) states that effective use of self-regulatory strategies in appropriate contexts leads to higher achievement levels, and consequently increases motivation to pursue it. Turan and Demirel (2010) investigated the linkages between SRL and achievement in the Turkish context and disclosed that improving the learners’ self-regulated learning skills results in greater levels of comprehension and more effective learning outcomes which finally determines self-efficacy beliefs. In the study conducted by Abbasnasab Sardareh, Mohd Saad, and Boroomand (2012) on this interaction, a strong correlation between the learners’ academic achievement and the use of SRL strategies was displayed. A gender

difference was also unearthed by them in favor of girls being more self-regulated and academically successful.

The interactions between SRL, motivation, and academic achievement advocate some implications for language teachers and educators. A study by Labuhn, Zimmerman, and Hasselhorn (2010) showed that the learners who were trained on how to self-regulate academically outperformed the ones who did not get the training. Imitation and monitoring were the skills included in their training programs. Ruban and Reis (2006) also reached similar findings specifying that self-regulated learners were more likely to achieve in academic and occupational contexts. In addition, Mahmoodi, Kalantari, and Ghaslani (2014) emphasized the learners' need to practice different SRL strategies to become more independent in the future. Kormos and Csizer (2014) also advocated self-regulation training for L2 learners to be able to choose the most operational self-regulation strategies for themselves and apply them successfully. They recommended taking inspiration from educational psychology since various methods of training have been investigated in that field (e.g., Cleary & Zimmerman, 2004). Based on the findings and suggestions of these studies, it has become apparent that self-regulation training needs to be included in educational contexts. In line with this conclusion, Zimmerman (1990) suggested an instruction model with three components to intervene and support self-regulated learning: strategic behavior, metacognition, and motivation. The first component in the model, strategic behavior, refers to the knowledge and use of language learning strategies. Metacognition is focused on monitoring the effectiveness of the strategies and changing their application patterns if needed. Zimmerman (1990) articulates that self-regulation is a self-motivated process. Thus, the learners' willingness to spend time and effort on learning is the basic motivational component of it. Considering that motivation is also a process that can be manipulated through instruction, it is included in that model aiming to improve learning processes.

## **The Role of Self-regulatory Strategy Use in DMC**

Studies on the role of self-regulatory strategy use in DMC can be summarized in two groups: initial studies suggesting the absence of self-regulation strategies in the intense motivational current and contemporary studies acknowledging the presence of it in cases of breakdowns in DMC structure. Initially, the interactions between DMC and self-regulation were not deeply investigated; however, considering the structure of the DMC, Dörnyei and his colleagues (e.g. Dörnyei et al., 2014; Muir & Dörnyei, 2013) introducing the construct into the field, suggested that the individuals who were caught up in the current do not need any conscious control of their behavior through self-regulatory strategy use because they do not see any obstacles to overcome during the process. In addition, they asserted that DMC is an unforced automatic process that both produces and uses the energy that is needed to function, and self-regulation cannot explain the goal striving in DMC-like constructs. According to them, people in that current automatically function to reach their goals because they have “automatized behavioral routines” and they benefit from “nonconscious self-regulation” (Dörnyei et al., 2014, p. 85). Nonconscious self-regulation has been defined as a strong construct serving both to initiate goal-oriented behavior and enabling learners to overcome distractions and obstacles. Therefore, it is asserted that the experience of being in the current provides a “visionary single-mindedness” to the people, and being unconsciously engaged in the current leads them not to focus on or realize any other alternative behaviors but the goal-oriented ones.

On the other side, it was revealed by contemporary research that long-term constructs such as DMC would always cause challenges due to their emotionally, mentally, and physically demanding nature (Başöz & Gümüş, 2022; Jahedizadeh & Al-Hoorie, 2021; Jahedizadeh et al., 2021; Pietluch, 2022; Sak & Gürbüz, 2022). Thus, the use of self-regulatory strategies was likely for several reasons during the intense motivational state. For example, it is a fact that creating behavioral routines and following

them regularly until they are automatized are processes requiring conscious regulation, because as stated by Dörnyei et al., (2014), making new habits and routines an automatic part of daily life requires some amount of time. In line with their assertion, Başöz and Gümüş (2022) displayed that a DMC participant in their study preferred volitional control at the beginning of the current to create her study routines. Although the following stages of her progress were not reported in the study, it is still informative regarding the presence of self-regulatory strategy use in a DMC experience.

In addition, it has been stated by Dörnyei et al. (2014) that the initiation of DMC through triggering stimulus does not guarantee that the current of energy will last for a long time but “multiple mini-explosions of motivational impetus” periodically recharge the process to ensure its permanence until reaching the end goal (p. 70). While Dörnyei et al. (2015) presented regular progress checks as a core feature of the intense motivational current functioning to re-energize the learners, Zarrinabadi et al. (2019) asserted that they could not be conducted without consciousness; thus, it is not fair to call DMC as a purely automatized process. Zarrinabadi et al. (2019) talked about regular progress checks as conscious control over the DMC state since conducting them without volitional mechanisms was impossible.

Finally, investigating DMC from the perspective of Complex Dynamic Systems Theory (Larsen-Freeman, 2015), Dörnyei and his colleagues (Dörnyei et al., 2014; Muir & Dörnyei, 2013) explained that the power of DMC stems from its capacity to overcome difficulties and to regulate emotional ups and downs. Yet, they lacked a clear explanation of how it was achieved without volitional actions based on research findings. In addition, no comprehensive research was available about the role of voluntary and conscious self-regulation in DMC back then. On the other side, contemporary studies by Muir (2020), Jahedizadeh and Al-Hoorie (2021), Sak and Gürbüz (2022), and Pietluch (2022) emphasized the mental, physical, and emotional exhaustion arising from the intensity of the DMC and referred to conscious coping strategies to handle them. They drew attention

to the instabilities in the structure of DMC due to the challenges of that long-term experience. For example, Jahedizadeh and Al-Hoorie (2021) stated that positive emotions cannot be smoothly pursued throughout the whole process, providing support for Ibrahim (2020) and Muir (2020) who discovered negative feelings such as frustration, boredom, and anxiety due to the overwhelming nature of the DMC. Similarly, Sak and Gürbüz (2022, p.14) stated that "... positive emotions may not always be retained at all stages of DMC (see Dörnyei et al., 2015), and thus the portrayal of DMC as a universally positive experience needs to be refined". They explained that to handle the emotional challenges, the use of self-regulatory strategies was observed in their data in the forms of talking to friends about the situation, taking some time off to relax, or talking to a nonnative speaker of English to feel more comfortable after having difficulties interacting with a native. Finally, Peng and Phakiti (2022) questioned the lack of volition in DMC asserted by Dörnyei and his colleagues. According to them, there is still not enough empirical research to define the framework as entirely unconscious. Peng and Phakiti (2022) state that the DMC framework is "multi-faceted and dynamic in nature" (p. 18) since its foundations are based on several theories in the field. Thus, they suggested that there is a need for more empirical research to clarify the hypotheses of the DMC framework before defining it as a conscious or unconscious process.

To conclude, as suggested by Dörnyei et al. (2015, p. 104), "the DMC phenomenon might turn out to be a basic ingredient in understanding human motivation and achievement in general", and thus it is crucial to have a thorough understanding of its structure and the factors affecting its power and long-term sustainment.

## **The Other Individual Difference Factors Related to DMC**

### ***Language Learning Effort***

The effort, which is the equivalence of volition in educational psychology, is a widely mentioned term in L2 learning contexts. Broadly speaking, it is the energy spent on

studying to learn a skill or subject area, complete a task, or meet the expectations of significant others related to learning (Carbonaro, 2005; Pintrich, Smith, Garcia, McKeachie, 1993; Zimmerman & Risemberg, 1997). Foreign language learning effort has been identified as a sub-construct of L2 learning motivation (Gardner, 2001) and refers to the time, energy, and other personal resources invested in learning L2. Gardner (2001) states that motivation to learn a language requires taking action to accomplish it, and the action stage corresponds to the effort in the process. Thus, it can be concluded that foreign language learning effort is “composed of motivated acts geared towards learning a non-native language” (Karabiyik & Mirici, 2018, p. 374).

Carbonaro (2005) categorized effort into three different types of behaviors: rule-oriented effort requires acting in accordance with the classroom and school rules; procedural effort relates to participating in class activities and completing homework; and finally intellectual effort refers to more complicated procedures such as mastering the subject area via doing reviews and extra work. Another classification has been provided by Bozick and Dempsey (2010) and they also proposed three types of effort that are procedural, substantive, and non-compliant. Procedural effort is related to a minimum amount of effort such as doing the required tasks and obeying the rules. Substantive effort is about in-class and out-of-school learning behaviors to reach mastery. Lastly, non-compliance refers to behaviors that hinder learning such as inattentiveness and disobedience to the rules.

Kormos and Csizer (2014) described learning effort as the overlapping point of self-regulation and motivation since it is central in both constructs. The relationship between them is not much complicated though. Language learning effort as a motivated action activates the self-regulatory strategy use of the learners (Kormos & Csizer, 2014) and causes autonomous learning in the end. Reciprocally, self-regulatory strategies guide the learners' effort to act successfully in the learning process (Zimmerman, 1989). Exerting effort into learning and sustaining it in the cases of challenges have been

presented by several researchers among the characteristics of successful self-regulators (Boekaerts, Pintrich, & Zeidner, 2000; Zimmerman, 1994, 1998; Zimmerman & Schunk, 2001). Language learning effort has also been defined as a precursor to attaining the ideal L2 self since it would not be sensible to wish for it without any intended effort (Kormos & Csizer, 2014).

Since language learning is a challenging procedure exploiting personal resources, the effort has an undeniable role in it. Dörnyei (2001) advocated that all L2 learners have the chance of being successful if and only if they pursue high effort. Numerous studies provided support for his findings stating that L2 learning effort and achievement are positively and tightly interlinked (e.g. Ampofo & Osei-Owusu, 2015a, 2015b; Inagaki, 2014; Dramanu & Opare, 2002; Carbonaro, 2005).

Similar to several constructs in language learning psychology, the effort is also a phenomenon that has been hard to measure for years. Researchers mainly relied on the number of hours spent studying in class or out-of-class time to learn (Ampofo & Osei-Owusu, 2015a, 2015b; Inagaki, 2014). However, that type of measurement was asserted to be problematic since different learners would need different amounts of time to reach a specific level of competence, and individual factors would intervene (Kormanik, 2011). In addition, it would not be possible to catch the exact number of study hours due to breaks or distractions, so the number reached at the end would not reflect pure reality. Some others tried to quantify learning effort based on the learners' motivational intensity since they are two related constructs. However, Carbonaro (2005) objected to this attempt explaining that although some students may put similar amounts of effort into the learning task, they may still have different motivational intensities based on their individual characteristics. Thus, motivational intensity and learning effort might not always correspond to each other. The gap in the field on a valid and reliable measurement tool required scales specifically designed for language learning efforts. To meet the need in the Turkish context, Karabiyik and Mirici (2018) developed Foreign Language Learning



Effort scale with 17 items based on the motivation theories by Deci and Ryan (1985), Gardner (1985), and Dörnyei and Otto (1998) besides the works of Carbonaro (2005) and Bozick and Dempsey (2010). It can be suggested as a reliable and valid scale in the Turkish context (Karabıyık & Mirici, 2018).

### ***Future L2 Self-guides***

At the beginning of the millennium, a new theory named L2 Motivational Self-System was presented by Dörnyei (2005) based on changes in the understanding of the L2 motivation construct. It has been grounded on the Possible Selves Theory by Markus and Nurius (1986, 1987) and included three main components which are the ideal L2 self, the ought to L2 self, and the L2 learning experience. The ideal L2 self has been described as a “representation of all the attributes that a person would like to possess (e.g., hopes, aspirations, desires)” (Csizer & Dörnyei, 2005, p. 616). It refers to the promotion-focused self, which includes a clear vision of favorable future goals such as learning English to improve professionally and feel successful (Csizer and Dörnyei, 2005). The learners with ideal L2 self have positive emotions regarding their L2 learning goals and they personalize the value of reaching their goals which finally leads to internalization of them (Kim, 2009). Ought to L2 self, on the other hand, is defined as “the attributes that one believes one ought to possess (such as various duties, obligations or responsibilities)” (Csizer & Dörnyei, 2005, p. 617). It is prevention-focused, however ought to goals have the potential to turn into ideal goals if they can be internalized by the learners (Kim, 2009). Finally, the L2 learning experience can be described as “the situation-specific motives related to the immediate learning environment and experience” (Csizer & Dörnyei, 2005, p. 617). Contrary to the ideal and ought to L2 self-guides, which are called future self-guides, the L2 learning experience is more concerned with context-dependent learning factors which influence motivation (Azarnoosh & Birjandi, 2012).

To continue with the relationship between self-guides and self-regulation, the role of goals needs focused attention. Zimmerman (1998) describes self-regulation in relation

to the learners' control of their motives which include goals, future self-guides, and intended learning effort. Goal setting as a significant component of self-regulation affects motivation in various ways (Zimmerman & Schunk, 2008). They are influential in learners' choosing task-related actions, enhancing their effort and persistence in it, and guiding their emotional reactions related to the tasks. In addition, goals have a crucial impact on the learners' imagination of themselves as successful language learners, namely their ideal L2 self (Dörnyei, 2005; Kormos & Csizer, 2008). As reported by Kormos and Csizer, (2014), the ideal L2 self is strongly related to the effort invested in learning, and learning effort has been revealed to activate the use of self-regulated control strategies more, finally leading to autonomous and independent learning. Thus, Kormos and Csizer (2014, p. 294) concluded that "strong learning goals and positive future self-guides without effective self-regulation are not sufficient to promote autonomous learning behavior". Their conclusion indicates that in the language learning context, self-regulation functions as a mediating factor between motivational constructs such as goals, self-guides, and effort to activate autonomy and independence.

### ***Vision***

Vision, another construct included in that study based on the Possible Selves Theory by Markus and Nurius (1986, 1987), is in very close interaction with future self-guides. It has been defined in the SLA context by Muir and Dörnyei (2013) as "the mental representation of the sensory experience of a future goal state" (p. 357). Vision has been presented by researchers as among the strongest determiners of L2 motivation activating long-term effort (Dörnyei & Kubanyiova, 2014). It is also suggested to increase L2 motivation by helping learners create a clear ideal L2 self (Dörnyei & Chan, 2013; Murray, 2013). In addition, it has been stated to have a central role in the DMC construct since DMC is mainly based on goal/vision-orientedness (Muir & Dörnyei, 2013). Muir and Dörnyei (2013) highlight the role of vision in the DMC experience as one of its core components creating the current and causing the sustainment of it until reaching the

desired goal. On the other hand, the key role of vision in predicting motivated behavior, effort, and L2 achievement has been doubted in a replication of You, Dörnyei, and Csizer's (2016) study conducted by Hiver and Al-Hoorie (2020). Contrary to the findings by You et. al (2016) indicating that vision and sensory styles, such as visual and auditory, predict stronger future self-guides finally leading to increased effort and achievement, Hiver and Al-Hoorie (2019) did not provide support for that. In addition, various recent studies suggested that a learner could experience DMC without creating a vision of the goal (Al-Hoorie & Al Shlowiy, 2020; Başöz & Gümüş, 2022; Henry et al., 2015; Ibrahim & Al-Hoorie, 2019; Jahedizadeh & Al-Hoorie, 2021; Sak & Gürbüz, 2022). To clarify, vision could be argued to induce the current; however, it might not be vital since the presence of a clear end goal is the primary factor for the initiation and sustainment of the current. Thus, vision is suggested to be further investigated concerning its position to impact future self-guides, language learning effort, DMC, and achievement.

## **Chapter 3**

### **Methodology**

In this chapter, research questions guiding the study will be restated and the theoretical framework of the methodology will be explained. Then, the pilot study and actual study procedures will be introduced separately in terms of their settings, participants, instrumentation, data collection, and data analysis processes.

#### **Research Questions**

The following research questions guide the study:

1. What are Turkish EFL learners' levels of DMC dispositions and the related ID factors (self-regulated strategy use, L2 learning effort, ideal L2 self, and imagination capacity)?
2. What are the relationships between participants' DMC dispositions and the related ID factors (self-regulated strategy use, L2 learning effort, ideal L2 self, and imagination capacity)?
3. What are the interaction effects among Turkish EFL learners' DMC dispositions and the related ID factors (self-regulated strategy use, L2 learning effort, ideal L2 self, and imagination capacity) based on the literature-based hypothesized model (Figure 1)?
4. What do the participants report about their DMC experiences and self-regulated strategy use and language learning effort?
  - a. What are the characteristic features of DMC experiences in different DMC groups (e.g. DMC, DMC-like, No-DMC, and starting in DMC-like and ending up in NO-DMC groups)?
  - b. Of the ID factors that have a direct impact on DMC, what are the roles of self-regulated strategy use and language learning effort in different DMC groups from the perspective of the participants?

## **Theoretical Framework for the Pilot and Actual Studies**

The current study was conducted in two phases: a pilot study and an actual study. The pilot study was conducted in the 2019-20 spring term and then the actual study followed it in the 2020-21 fall term. In this study, the researcher applied a sequential explanatory mixed method design which is “characterized by the collection and analysis of quantitative data in a first phase of research followed by the collection and analysis of qualitative data in a second phase” (Creswell, 2009, p. 211). The quantitative phase was a survey study using questionnaires. In terms of the format of the questions, a closed questionnaire was recruited. While open-ended questions ask the participants to write an answer, close questions require them to choose an answer from the given options or to grade a statement. Therefore, it is easier to conduct and score the results of a closed questionnaire as it provides standardized data to the researcher (Fraenkel & Wallen, 2006). In addition, questionnaires allow the researcher to reach a large number of participants at a time (Best & Kahn, 2006) and as the number of respondents increases, the reliability of the study also increases.

The main variables of this study, self-regulatory strategy use, language learning effort, and DMC require by nature qualitative data as well to reveal them more clearly. Therefore, the second phase of the study was a longitudinal qualitative design using first retrodictive qualitative modeling (RQM), and then language learning diaries, interviews, and motigraphs. As explained by Chan, Dörnyei, and Henry (2015), RQM suggests a reverse order of conducting research. Contrary to the traditional way of investigating the path to the outcomes, RQM looks into the outcomes to see the developmental routes. In this study, RQM was used to determine different DMC groups. Then, the study continued using language learning diaries, one-to-one interviews, and motigraphs. Interviews and language learning diaries including motigraphs were preferred by the researcher as they were asserted to offer profound information on the relationship between self-regulated strategies, motivational concepts, and autonomous learning (Kormos & Csizer, 2014). In

addition, Schmitz, Klug, and Schmidt (2011) suggested that learning diaries can allow for retrieving a significant amount of longitudinal data, which was another reason for including them in that research design.

Although a mixed-method research design was utilized, only the quantitative stage was included in the piloting stage. The pilot study aimed to see whether the composite instrument and data collection procedures would work without any problems for the actual study. Testing the reliability and practicality of the instruments to be employed and detecting any potential problems that could occur during the main study were targeted.

## **Pilot Study**

### ***Setting and Participants for the Pilot Study***

The pilot study was conducted at the Social Sciences University of Ankara, School of Foreign Languages. The students belonged to six different departments which are Bachelor of Arts in Law, Political Science and Public Administration, Economy, Business Administration, International Relations, and English Language and Literature. Data for the pilot study were collected during the fourth period of the school year. Therefore, the participants were mainly the ones who took the proficiency test to move on to their departments at the end of the second period, but they could not succeed in it.

The participants of the pilot study were 117 adult learners of English as a foreign language. Demographic information of the participant group is available in Table 1 below.

**Table 1**

#### *Demographic Information of the Participants*

	Variable	N	%
Gender	Female	67	57.3
	Male	50	42.7

Department	Bachelor of Arts in Law	32	27.4
	Business Administration	23	19.7
	International Relations	19	16.2
	English Language and Literature	4	3.4
	Political Science and Public Administration	19	16.2
	Economy	18	15.4
Age	18-21	109	93.2
	22-30	7	6
	41-50	1	.9

The number of females was 67 (57.3%) while the male participants were 50 (42.7%). 32 (27.4%) participants were from the Bachelor of Arts in Law Department, 23 (19.7%) of them were to study Business Administration, 19 (16.2%) participants belonged to International Relations Department, only 4 (3.4%) of them were from English Language and Literature Department, 19 (16.2%) participants would study at Political Science and Public Administration Department, and finally 18 (15.4%) of them were to study Economy. A great majority of the participants (N = 109, 93.2%) were in the same age range (18-21), while only 7 (6%) participants were between 22-30, and 1(0.9%) participant was in the 41-50 age band.

### ***Instrumentation for the Pilot Study***

The 110-item composite instrument to be used for quantitative data was tested during the pilot study. The main variables in it were DMC, self-regulated strategy use, L2 learning effort, ideal L2 self, imagery capacity, and self-efficacy. The instrument (see Appendices E and F) consisted of three parts. The first one was designed to retrieve demographic information such as gender, department, and age. The second part of the instrument was devoted to explaining the DMC construct with examples and also covered the DMC disposition instrument with 12 items. The third part consisted of self-regulated strategy use (1-34), L2 learning effort (35-51), ideal L2 self (52-61), imagery capacity (62-66), and self-efficacy (67-98) scales.

### ***Implications for the Actual Study***

The results of the pilot study conducted to test the reliability and practicality of the quantitative data collection instrument showed that each instrument in the study had good reliability scores: DMC (12 items):  $\alpha = .70$ , self-regulated strategy use (34 items):  $\alpha = .92$ , L2 learning effort (17 items):  $\alpha = .73$ , ideal L2 self (10 items):  $\alpha = .93$ , imagery capacity (5 items):  $\alpha = .76$ , self-efficacy (32 items):  $\alpha = .95$ . However, the high item number of the composite instrument was criticized by the participants and the colleagues who helped the researcher to collect the data. Although the planned time for conducting the instrument was around 20 minutes, it was reported to take around 25 minutes, which harmed the practicality of the instrument. The colleagues also stated that they could see the boredom of the participants during the administration of the instrument, especially through the end of it. Thus, they suggested using a lower number of items if possible.

To solve the problem with the number of items in the composite survey and to increase the practicality of the administration, the researcher decided to exclude self-efficacy from the study. Considering the large number of items in the self-efficacy scale, it appeared to be the best solution for the soundness of the analysis regarding the other ID variables. In addition, omitting some subscales from the other surveys could help resolve the item number issue of the composite instrument. The Self-Regulated Foreign Language Learning Strategy Questionnaire (Srfllsq) by Habok and Magyar (2018) included 34 items and five subscales which were metacognitive, cognitive, meta-affective, meta-sociocultural-interactive, and sociocultural-interactive. Since the current study would be conducted in an EFL setting where the learners had limited interaction with the native speakers of English, eliminating the meta-sociocultural-interactive and sociocultural-interactive subscales could potentially help overcome the practicality problem. Furthermore, the meta-sociocultural-interactive subscale (8 items) had pretty longer and more complex items than the other ones in the survey and the sociocultural-interactive



subscale (4 items) appeared to have a lower reliability value ( $\alpha = .54$ ) than the other ones, which made them easier to be discarded.

Apart from the practicality problem of the composite instrument, there were no observed or reported concerns regarding the quantitative data collection tools. Thus, excluding the self-efficacy variable from the study and eliminating subscales from the self-regulated learning scale decreased the total number of items from 110 to 66, and made the composite instrument more practical and appropriate for the main study.

## **Actual Study**

### ***Setting***

The main study was conducted at the Social Sciences University of Ankara, School of Foreign Languages. It is a newly-founded state university dating back to 2013. The students of that prep school belong to nine different departments which are Bachelor of Arts in Law, Economy, Business Administration, International Relations, Political Science and Public Administration, Psychology, Sociology, History, and English Language and Literature. Except for the Bachelor of Arts in Law which has thirty percent English medium instruction for undergraduate students, the other departments teach the undergraduate courses a hundred percent in English. Therefore, the prep school aims to teach English for general purposes and to help the students develop four main skills (listening, speaking, reading, and writing) in one year of prep-class education. The curriculum is based on communicative language teaching. The learners have 25 hours of English lessons per week. They start with the A1, A1+, A2, or B1 levels according to the Common European Framework of Reference for Languages (CEFR, 2001). They have only a maincourse lesson which incorporates four skills, vocabulary, and grammar teaching. B2-level students have a separate writing course of five hours per week. The school year includes four quarters each of which consists of eight weeks. During these 8-week periods, the students are required to get the minimum grade, which is 75 out of 100,

to take the end-of-period test. If they can also get a passing grade after this test, they move on to the next level.

### ***Participants***

The participants of this study were chosen via convenience sampling and critical case sampling. Convenience sampling was utilized to find participants for the quantitative stage, and this school of foreign languages was preferred since it was accessible for the researcher to contact, it was logistically appropriate to travel, and it had a large student population. To find out representative cases of different DMC groups (pure DMC, DMC-like, No-DMC) in this population, critical case sampling was utilized and instructors teaching at this school assisted the researcher. After being informed about the DMC construct by the researcher, the instructors nominated potential participants for the DMC and No-DMC groups. DMC-like group was identified by the researcher. Finally, expert opinion and inter-coder reliability checks were utilized for the final decision regarding the appropriateness of each case to the aforementioned DMC profiles.

The student participants of the quantitative phase from the Social Sciences University of Ankara, School of Foreign Languages consisted of 305 adult learners of English as a foreign language. A great majority of the learners of this school have gone through similar English instruction until university following the curriculum of the Ministry of Education at primary, second, and high schools. Only the participants from the English Language and Literature department are distinctive in that they enter the department by taking a language test as a part of the university entrance exam.

To collect qualitative data, 28 students participated in the study and 2 of them were international students who also learnt English in EFL contexts before coming to this university. They were not excluded from the research design since the research questions did not have any culture-related focus. In addition, they provided rich and valuable data that would have great impact on the development of knowledge for the purposes of the

study. The participants of this stage were chosen via critical case sampling based on the information instructors provided about them. Collecting detailed information from these students to decide whether they were experiencing DMC or not at the time of the study was intended. The demographic information of these participants is provided in Table 2 below. Although this stage started with 28 participants, at the end of the 8-week data collection period, 9 participants were found to provide sufficient data for analysis in their bi-weekly language learning diaries and motigraphs. Thus, the qualitative stage ended up reporting findings from 9 participants.

**Table 2**

*Demographics of the Student Participants in the Qualitative Phase (n = 28)*

	Variable	N	%
Gender	Female	14	50
	Male	14	50
Department	Bachelor of Arts in Law	5	17.9
	Political Science and Public Adm.	5	17.9
	Business Administration	4	14.3
	Sociology	4	14.3
	International Relations	3	10.7
	Psychology	3	10.7
	Economy	2	7.1
	History	2	7.1
Age	18	8	28.4
	19	7	25
	20	5	17.9
	22	5	17.9
	23	1	3.6
	25	1	3.6
	28	1	3.6

The numbers of male (n = 14, 50%) and female (n = 14, 50%) participants were equal. The majority of the participants were from the Bachelor of Arts in Law (n = 5,

17.9%), Political Science and Public Administration (n = 5, 17.9%), Business Administration (n = 4, 17.9%), and Sociology (n = 4, 17.9%) departments. More than half of the students were at the ages of 18 (n = 8, 28.4%) or 19 (n = 7, 25%). The mean of these participants' age was calculated to be 20.1.

Another participant group of this study was language instructors who teach the classes in the setting. Twelve instructors were interviewed as a part of the RQM stage of the study and they provided information to the researcher about their students. The demographic details of the instructor interviewees in the qualitative phase are provided in Table 3.

**Table 3**

*Demographics of the Instructor Interviewees (n=12)*

	Variable	N	%
Gender	Female	10	83.4
	Male	2	16.6
Years of teaching experience	7	1	8.3
	9	1	8.3
	10	1	8.3
	11	2	16.6
	12	4	33.6
	14	1	8.3
	18	1	8.3
Educational level	20	1	8.3
	BA	6	50
	MA	5	41.7
	PhD	1	8.3

Instructor participants of the study were mainly females (n = 10, 83.4%) while only 2 (n = 16.6) of them were male instructors. Their years of teaching experience ranged from 7 to 20. 4 (33.6%) instructors had 12 years of teaching experience, and 2 (16.6%) of them have been teaching for 11 years. Each of the other teaching experience groups was

represented by 1 (8.3%) instructor interviewee. Among these participants, 6 (50%) were BA graduates, 5 (41.7%) were with an MA degree, and only 1 (8.3%) of them had graduated with a Ph.D. degree.

### ***Instrumentation***

For the main study, quantitative data were collected via a 66-item composite survey instrument (see Appendices G and H) which was finalized based on the feedback from the pilot study. The main variables in it were DMC, self-regulated strategy use, L2 learning effort, ideal L2 self, and imagination capacity/vision.

To collect qualitative data, first, retrodictive qualitative modeling (RQM) was employed which included focus group interviews with instructors and one-to-one semi-structured interviews with students. Guiding questions and prompts were designed for these interviews (see Appendix E). During the next stage of data collection, biweekly language learning diaries (see Appendices J and K) and motigraphs (see Appendices H and I) were used. Lastly, unstructured follow-up interviews, which were specifically based on each participant's answers, were conducted. Detailed information about the instruments is provided below.

**Composite Survey Instrument.** Based on the results of the pilot study, the composite instrument was revised omitting a variable and two subscales from the study to make it more practical. Control items were also added to the instrument. Finally, the survey instrument consisted of three parts. The first one was to retrieve demographic information such as gender, department, and age. The second part of the instrument included the DMC disposition instrument with 12 items. The third part consisted of self-regulated strategy use (1-22), L2 learning effort (23-39), ideal L2 self (40-49), and imagery capacity (50-54).

**DMC Disposition Instrument.** For the quantitative data of the participants' DMC dispositions, DMC Disposition Questionnaire developed and validated by Muir (2016) was

conducted. The instrument was designed to reveal three important points about the respondents' DMC dispositions: the percentages of people who experienced it, those who had DMC experience, how that experience was in terms of length, strength, initiating reasons, and so on. The instrument included both closed questions and some open-ended questions. However, open-ended questions were omitted from the scale to make it shorter and more practical.

The questionnaire was a little complex including different formats of items. For example, some multiple-choice questions were available asking the learners to choose among 3 or 5 options, some questions required only "yes" or "no" answers, and in the main body section, a 5-point Likert scale was used. While 1 referred to "strongly disagree", 5 referred to "strongly agree". Only the main body section with 12 items using Likert scale was recruited for the study.

The original version of the instrument was in an online format for easier access to big numbers of participants. However, an adapted pen-and-paper version of the instrument was preferred for the study as it would be combined with some other instruments and then given to the respondents. Muir (2016) reported high internal consistency of the scale with a Cronbach's alpha value of  $\alpha=.84$ . She added that to calculate that score only the main body section with 12 items, with a 5-point Likert scale, was used. The other items in different formats such as "yes" or "no" questions were not included. The questionnaire was used by Ghanizadeh and Jahedizadeh (2017) in Persia, by Pietluch (2018) in Poland, and by Gümüş (2019) in Turkey.

Considering the divergent proficiency levels of the participants and to prevent any problems that could emerge due to the low proficiency levels of some, the instrument was employed in their L1. Turkish version of the scale adapted from the study by Gümüş (2019), who reported high reliability score ( $\alpha = .85$ ), was utilized in this study. The pilot study also revealed an acceptable reliability score for the scale ( $\alpha = .70$ ).

**Self-regulated Strategy Use Instrument.** To collect data on the self-regulated strategy use of the participants, the Self-regulated Foreign Language Learning Strategy Questionnaire (Srfllsq) by Habok and Magyar (2018) was preferred. The scale originally consisted of 34 items with five subscales that were metacognitive (8 items), cognitive (6 items), meta-affective (8 items), meta-sociocultural-interactive (8 items), and sociocultural-interactive (4 items) self-regulated strategies. However, after the piloting stage of the instrument, it was shortened omitting the meta-sociocultural-interactive (8 items) and sociocultural-interactive subscales (4 items) - due to the reasons explained in the pilot study section -, so that it would be more practical to employ it with 22 items in total.

The instrument was developed based on the Strategy Inventory for Language Learning (SILL) by Oxford (1990). It was validated by Habok and Magyar (2018). They calculated internal consistency scores for each subscale and the results were as follows:  $\alpha=.84$  for the metacognitive scale,  $\alpha=.75$  for the cognitive scale,  $\alpha=.77$  for the meta-affective scale. The pilot study also revealed high or acceptable reliability scores for each subscale:  $\alpha=.73$  for metacognitive,  $\alpha=.72$  for cognitive, and  $\alpha=.69$  for meta-affective. A 5-point Likert scale was designed. While 1 referred to “never” showing no use of the self-regulated strategy in question, 5 referred to “always” representing constant use of the mentioned strategy.

To ensure that students' proficiency levels did not influence the data retrieved via that scale, the instrument was translated into their L1, Turkish, by the researcher and piloted in Turkish. The analysis of the semantic similarity disclosed a 9.5/10 mean score suggesting no significant meaning loss or shift between the original scale and the translated one.

**L2 Learning Effort Instrument.** The L2 learning effort of the participants was measured via the Foreign Language Learning Effort Scale (FLLES) by Karabiyik and Mirici (2018). The scale was specifically designed for tertiary-level EFL learners in Turkey,

and therefore perfectly fitted the participants of the current study. The instrument used for the main study was completely the same as the one in the pilot study.

FLLES had 17 items within four subscales which were non-compliance (3 items), procedural effort (3 items), substantive effort (8 items), and focal effort (3 items). Validation of the scale was also conducted by Karabıyık and Mirici (2018) revealing high scores of reliability. Cronbach's alpha value of the whole scale was reported to be  $\alpha=.85$  by the designers of it. They also reported the values for each subscale, .80, .83, .82, and .77 respectively for non-compliance, procedural effort, substantive effort, and focal effort. The results of the pilot study also showed high internal consistency scores for the whole scale,  $\alpha=.73$ , and also for each subscale:  $\alpha=.70$  for non-compliance,  $\alpha=.70$  for procedural effort,  $\alpha=.77$  for substantive effort, and  $\alpha=.75$  for focal effort. A 5-point Likert scale was utilized for that instrument as well. While 1 referred to "never", 5 referred to "always".

***Ideal L2-self Instrument.*** The ideal L2 self of the learners in this study was estimated via subscales adapted from Taguchi, Magid, and Papi's (2009) questionnaire. Among several subscales and a large number of items of the instrument, only the ones referring to the ideal L2 self, which was 10 in number, were utilized in the current study. They were piloted by the researcher and no revisions were needed for the main study.

Dörnyei and Chan (2013) stated having adopted Taguchi et al.'s (2009) questionnaire in their research and they reported that Cronbach's alpha score for the ideal English self was  $\alpha = .78$ , which was quite satisfactory. Due to the low proficiency level of the participants, the scale was conducted in their L1, and translated version of it by Demir-Ayaz (2016) was employed. The Cronbach's alpha value for the Turkish version of the ideal L2 self scale was reported to be  $\alpha = .92$  by Demir-Ayaz (2016), which was highly satisfactory. The pilot study also provided a quite high reliability score:  $\alpha = .93$ . The instrument was designed with a 5-point Likert scale. Participants were to choose 1 referring to "never" to indicate very low ideal L2 selves, and they were supposed to mark 5 referring to "always" to show their high ideal L2 selves.



***Imagination Capacity Instrument.*** To find out the imagery of the respondents, the imagination capacity scale by Kim and Kim (2014) was employed. It consisted of 5 items. Similar versions of that scale were used by Kim (2009), Kim and Kim (2011), and Yang and Kim (2011). The Cronbach's alpha coefficient score of the scale was reported to be  $\alpha = .70$  by Kim (2009),  $\alpha = .72$  by Kim and Kim (2011),  $\alpha = .68$  by Kim and Kim (2014) reflecting acceptable internal consistency of the scale. The reliability analysis of the pilot study also revealed a satisfactory Cronbach's alpha score:  $\alpha = .76$ . A 5-point Likert scale was used, and while 1 referred to "never" signifying very low imaginary capacity, 5 referred to "always" representing high imagination.

A translated version of the scale by the researcher was employed for ease of understanding on the part of the respondents. Following the translation and blind back-translation procedures, highly satisfactory synonymy values were revealed between the original and translated versions of it (9.6/10). After the piloting phase of the instrument, no modifications were required on it and it was used as in the pilot study.

***Qualitative Data Collection Tools.*** Qualitative data of this study were collected by conducting RQM which included focus group interviews with instructors and one-to-one semi-structured interviews with students. In addition, biweekly language learning diaries, motigraphs, and unstructured follow-up interviews with students were utilized.

***Focus Group Interviews.*** The qualitative phase of the study started with RQM (Chan, Dörnyei, & Henry, 2015) which suggests a reverse order of conducting research. Contrary to the traditional way of investigating the path to the outcomes, RQM looks into the outcomes to reveal the developmental routes. In this study, RQM was used to determine different DMC groups. Thus, firstly, focus group interviews were conducted with 12 instructors, and convenience sampling was used to choose them. The instructors were guided via 17 questions (see Appendix E) which were designed by the researcher, in English, based on the key components of the DMC construct (Dörnyei et al., 2016), the items in the DMC disposition instrument by Muir (2016), and adapting some interview

items from Zarinabadi, Ketabi, and Tavakoli (2019). Expert opinion was applied to the items to ensure their clarity, comprehensibility, practicality, and validity. Some revisions were made to them before the implementation. The items referred to specific characteristics of DMC students and the instructors were requested to decide whether their students had these characteristics during the time of data collection. They answered the questions as “Yes”, “Partially”, “No”, or “I don’t know” for each potential DMC student. During these interviews, they also nominated some students who were not caught up in the DMC experience at that time.

***One-to-one Semi-structured Interviews.*** One-to-one semi-structured interviews with students were the second stage of RQM. For these interviews, critical case sampling was utilized. Since the learners with pure DMC experience, DMC resembling experience and No-DMC experience were sought as the critical cases of the qualitative stage, the students nominated by the instructors were invited to the interviews. The purpose of this step was to investigate more deeply into their motivational trajectories and to decide whether they were having DMC experience or not as suggested by their instructors. A DMC-like group was also sought during that stage. The interview questions and prompts (see Appendix F) were designed by the researcher considering the key characteristics of the DMC concept (Dörnyei et al., 2016) and also adapting some items from the DMC Interview Protocol by Zarinabadi, Ketabi, and Tavakoli (2019). Expert opinion was requested for the interview prompts. Then, the items were translated into Turkish (see Appendix G) for ease of comprehension by the participants and blind translation and back-translation procedures were carried out. Each interview lasted around 30 minutes and they were audio-recorded.

***Biweekly Language Learning Diaries.*** Language learning diaries (see Appendices N and O) were designed for the longitudinal phase of the study lasting around one module (8 weeks). The participants chosen via RQM were requested to keep these diaries at two weeks intervals in their L1 (Turkish) and submit them to the researcher

online. International students ( $n = 2$ ) completed the diaries in English. During the one-to-one student interviews, the researcher ensured that their proficiency levels were appropriate to provide data in English. The diaries were structured by the researcher to gain compact and clear data from the participants regarding their motivational states, English learning activities, strategy or specific technique use, amount of effort, emotional states, and fluctuations about any of them reflecting the dynamic nature of the language learning process and also their personal progress. In line with these purposes, they were sent guiding questions every two weeks designed based on the research questions. The guiding questions were written in Turkish and checked by an expert for comprehensibility and alignment with the research questions.

***Motigraphs.*** The motigraphs were designed for the participants to present a pattern of their weekly motivational, emotional, and effort states reflecting upon the potential fluctuations and the dynamicity of the language learning process. The motigraphs were sent to the students with the language learning diaries at two-week intervals. A scale ranging from +5 (maximum/the most positive) to -5 (minimum/the most negative) was used and the participants were to self-plot their motivation, effort, and emotions (Chan, Dörnyei, & Henry, 2015) on them for each week throughout the 8-week module.

***Unstructured Follow-up Interviews.*** Unstructured follow-up interviews were conducted to gain comprehensive descriptions from the students about their language learning activities. These interviews were formatted grounded on the students' answers in language learning diaries and motigraphs. The points that were skipped or not clarified were scrutinized with further inquiries by the researcher. The motivational trajectories, efforts, and emotional states of the participants were also examined thoroughly. The salient ups and downs in the motigraphs and the reasons behind them were investigated. The unstructured follow-up interviews were conducted in participants' L1 and audio-recorded. That stage provided specific data regarding self-regulated learning strategies

used by different DMC groups, and also their fluctuating motivational, emotional, and effort states during the language learning process.

### ***Procedures for Data Collection***

Based on the pilot study findings, the composite survey for the quantitative design was revised and then the instruments for the qualitative phase were designed. The data for the main study were collected during the fall term of the 2019-2020 academic year. Table 4 below summarizes the data collection procedures for the actual study and also the instruments in each stage.

**Table 4**

#### *Data Collection Procedures and the Instruments for the Main Study*

Stages of the actual study	Data collection instruments
1. Quantitative data collection	<ul style="list-style-type: none"> <li>• The composite survey instrument</li> </ul>
2. Identification of participants for the DMC groups via Retrodictive Qualitative Modelling (RQM)	<ul style="list-style-type: none"> <li>• Seventeen guiding questions about the key features of the DMC construct</li> <li>• Semi-structured interview questions for the students</li> </ul>
3. The longitudinal research design for qualitative data	<ul style="list-style-type: none"> <li>• Biweekly language learning diary prompts and the motigraph table</li> </ul>
<ul style="list-style-type: none"> <li>• Focus group interviews with instructors</li> <li>• One-to-one semi-structured interviews with students nominated by the instructors</li> </ul>	
<ul style="list-style-type: none"> <li>• Biweekly diary keeping</li> <li>• Motigraph</li> </ul>	
4. The unstructured follow-up interviews	<ul style="list-style-type: none"> <li>• Participant-specific questions for the critical cases</li> </ul>

The procedure of this study mainly consisted of four stages. The composite survey instrument was applied at the beginning of the first module. The instructors who teach these students assisted the researcher during that process. First, a consent form (see Appendix L) and then the composite instrument were given to the students. During the implementation, the participants were encouraged to read the instructions carefully and not to skip any item as much as possible. The quantitative data were collected at the beginning of their class time and it took around 15 minutes.

Analysis of the quantitative data revealed that self-regulatory strategy use and L2 learning effort had the largest direct effects on the DMC dispositions of the learners without any mediation of other variables. Thus, the qualitative stage sought to further investigate their role in the DMC experience. First, the characteristic features of DMC experiences in different DMC groups (e.g. pure DMC, partial DMC, No-DMC) were explored. Then, detecting the strategy preference patterns of different DMC groups, exploring the dynamic structure of L2 learning effort in these groups, and finally revealing the effects of self-regulatory strategy use and L2 learning effort on the strength and long-term sustainment of DMC experience was targeted. To do so, initially DMC groups were created via retrodictive qualitative modeling (RQM), and then, a longitudinal research design was utilized to collect data from these groups.

For the RQM stage, the instructors who teach English to the participant group were invited for focus group interviews. 12 instructors were chosen based on their convenience and willingness to take part in the study. Due to the heavy workload of the instructors during that period, all 12 of them were not available at a time in the interviews, but they were scheduled in groups of four, three, and two based on their partnerships in teaching the same classes. Since at least two different instructors were teaching a class in that school, inviting them together and having a common decision from them about the nominated students was aimed. Since the purpose of these interviews was to search for the learners who have DMC experience, who do not have DMC experience, and who

have DMC resembling experience, the instructors were informed about the key features of the DMC state, and some example cases from the previous studies were presented to them to clarify the construct. Then, they were given the attendance lists of the classes they were teaching at that time to help them remember each student and asked to name around 2 to 6 students whom they think are caught up in DMC. For each student they suggested, they were requested to answer the questions on the focus group interview guide (see Appendix E), so that they would be able to elaborate on their decisions and provide support with their answers. After that, the instructors were expected to think about the opposite cases of DMC and asked to make a list of the students whom they think are not certainly in that intense motivational current. Then, the students nominated by instructors for each group were contacted and invited to one-to-one semi-structured interviews. Twenty-eight students volunteered to be interviewed. They were asked questions regarding their English language learning goals, attitudes towards learning English, motivational states and changes, emotional states, efforts, English learning behaviors, experiences, study habits, and so on. At the end of each interview, the interviewees were also given a motigraph and asked to self-plot their motivational states, emotional states, and effort at that time. The interviews were conducted in their L1 and audio-recorded under their permission. For the international students, the instructors teaching them were consulted and these students were interviewed in L2 after ensuring that they were proficient enough to comprehend and answer the interview questions in L2. Each interview lasted around 20 to 35 minutes. Then, the cases in different DMC groups were informed about the next stage of the study which is biweekly diary keeping, and their consent to participate in that stage was also ensured.

After the RQM in the first module, the next 8-week period (the second module) was devoted to the longitudinal data collection via the biweekly language learning diaries and motigraphs. During that period, the participants were expected to keep guided diaries at two-week intervals. The guiding prompts were sent to them via email on Fridays on the

second, fourth, sixth, and eighth weeks of the module, and they completed the diaries by the end of Sunday on these weeks. At the end of each diary, a motigraph referring to the related weeks was added and the participants also marked their motivational, emotional, and effort states for each week. That stage started with 28 participants, however, due to the dropouts during the following weeks 9 of them completed the whole process.

Finally, unstructured follow-up interviews were conducted with critical cases after the 8-week diary-keeping period. The purpose of that stage was to gain further data from the students about their language learning process in that school period. The interviews were conducted with 6 cases whose answers required more elaboration or explanation. They were asked detailed questions regarding their answers in language learning diaries and motigraphs. The salient ups and downs in the motigraphs and the reasons behind them were examined. These follow-up interviews were also conducted in participants' L1 and audio-recorded.

### ***Data Analysis***

To answer the research questions of this study, the data was explored both quantitatively and qualitatively. Regarding the first research question, the quantitative data gained from the composite survey instrument was analyzed descriptively via IBM SPSS Statistics. Mean values, frequencies, and standard deviation scores were reported for them. For the second research question, Pearson product-moment correlation coefficient was calculated to investigate the relationship between the variables.

The purpose of the third research question was to test the literature-based hypothesized model of DMC in the Turkish EFL context and show the relationships between the participants' DMC dispositions, self-regulated strategy use, L2 learning effort, imagery capacity, and ideal L2 self. Therefore, the path analysis technique which is a subcategory of structural equation modeling (SEM) enabling the researchers to examine

the relationships among the observed variables (Kline, 2005) was applied. IBM SPSS AMOS statistical software was used to analyze that research question.

The last research question was answered based on longitudinal qualitative data. The data collected via the RQM was scrutinized in the first step. The audio recordings of the interview data were transcribed and translated into English. After reading through the whole data set several times to get familiar with it comprehensively, thematic coding analysis and general content analysis principles (Dönyei, 2007) were applied. In the second phase, biweekly diary entries, motigraphs, and unstructured follow-up interview data were scrutinized. To do so, diary entries in the L1 of the participants were translated into English. Then, they were read through several times for general comprehension, codes were created for the themes, and they were interpreted. For the next step, the motigraph data were entered into Microsoft Excel Software and graphs were prepared for them. The fluctuations in the graphs were investigated further by looking into the participants' answers in the diaries referring to that week and also considering their answers during the follow-up interview. Finally, the unstructured follow-up interview data were transcribed and translated into English. The answers were compared with the ones from the previous analysis of the biweekly diaries and motigraphs to retrieve any related data to support them. The reliability of the analysis was ensured via an inter-coder reliability check.

### **Ethical Considerations**

This study was conducted considering ethical issues and several precautions were taken for that. First of all, approval of the Hacettepe University Ethics Commission was granted. Then, both instructor and student participants in all stages of the study were requested their written acceptance by signing a consent form. The form included information about the procedures of the study, informed the participants regarding their rights such as withdrawing from it whenever they like, and warranted confidentiality of



their answers. In addition to the consent form, the audio recordings of the interviews were taken by ensuring their oral permission again. They were reassured that the data would be used only for research purposes and would not be shared with any third parties irrelevant to the current study. Thereby, a warm and comfortable research environment was intended to be generated.

## Chapter 4

### Findings

For this study, the first three research questions (see Research Questions, page 5) were analyzed using quantitative data while the last research question required qualitative analysis. In this section, following the order of the research questions, first quantitative analysis will be reported, and then, qualitative results will be presented.

#### Quantitative Findings

***Research Question 1: What are Turkish EFL learners' levels of DMC dispositions and the related ID factors (self-regulated strategy use, L2 learning effort, ideal L2 self, and imagination capacity)?***

Descriptive statistics were conducted to examine the participants' levels of DMC dispositions, self-regulated strategy use, L2 learning effort, imagination capacity, and ideal L2 self. Mean scores and standard deviations were calculated for each individual difference factor. The results of the statistical analysis can be observed in Table 5 below:

**Table 5**

*Descriptive Statistics: Levels of DMC Dispositions, Self-regulated Strategy Use (SR), L2 Learning Effort, Imagination Capacity, and Ideal L2 Self*

	N	Mean	SD
DMC	260	3.38	.61
SR	305	3.32	.54
Effort	305	3.17	.48
Imagery	305	3.97	.82

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Ideal L2 Self	305	4.13	.78
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Findings indicated that the mean value for DMC levels of the tertiary level EFL learners ( $M = 3.38$ ,  $SD = .61$ ) was above the mid-point of a 5-point Likert scale, which was 2.5. For self-regulated strategy use, analysis was conducted for the variable and also the subscales of it which were meta-cognitive, cognitive, and meta-affective strategy use. The mean value for the self-regulation preference of the participants was above the mid-point of the scale ( $M = 3.32$ ,  $SD = .54$ ). According to the results, participants appeared to have the highest preference for cognitive strategies ( $M = 3.41$ ,  $SD = .69$ ), meta-affective strategies followed it in the second place ( $M = 3.29$ ,  $SD = .61$ ), and metacognitive strategies were the least preferred ones, though with a minor mean difference ( $M = 3.28$ ,  $SD = .62$ ). Table 6 below displays the results.

**Table 6**

*Descriptive Statistics: Levels of Meta-cognitive, Cognitive, and Meta-affective Self-regulated Strategy Use*

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Variable	N	Mean	SD
Meta-cognitive strategies	305	3.28	.62
Cognitive strategies	305	3.41	.69
Meta-affective strategies	305	3.29	.61

---

Descriptive statistics were used to find out the participants' L2 learning effort as well and as can be seen in Table 5 above, they reported putting a moderate level of effort into the L2 learning process ( $M = 3.17$ ,  $SD = .48$ ). According to the findings of the descriptive analysis employed to display the learners' levels of imagination capacity, they scored quite high in that scale as well ( $M = 3.97$ ,  $SD = .82$ ). Among the variables analyzed descriptively, ideal L2 self of the participants appeared to be the individual difference

factor with the highest mean score ( $M = 4.13$ ,  $SD = .78$ ). Table 5 above can be observed for the results.

***Research Question 2: What are the relationships between participants' DMC dispositions and the related ID factors (self-regulated strategy use, L2 learning effort, ideal L2 self, and imagination capacity)?***

A Pearson product-moment correlation coefficient was calculated to display the relationships among the participants' DMC dispositions and the independent variables including self-regulated strategy use, L2 learning effort, imagery capacity, and ideal L2 self. The interactions among the independent variables were also scrutinized. Preliminary analyses were conducted to ensure no violation of the assumptions of normality and linearity (see preliminary analyses on the next page). The results of the correlation analyses were presented in Table 7 below.

**Table 7**

*Pearson Product-moment Correlations between the Variables*

	1	2	3	4	5
DMC	1				
SR	.328**	1			
Effort	.268**	.679**	1		
Imagery	.225**	.314**	.44**	1	
Ideal L2 Self	.217**	.372**	.252**	.396**	1

\*\*Correlation is significant at the 0.01 level (2-tailed).

\*Correlation is significant at the 0.05 level (2-tailed).

As can be seen from the table above, there were statistically significant correlations between the DMC dispositions of tertiary-level EFL learners and the other ID factors. To begin with, the DMC dispositions of the participants were significantly correlated with their self-regulated strategy use ( $r = .328, p < .01$ ). A moderate positive correlation was revealed between them (Cohen, 1988). A small positive correlation was computed between DMC and L2 learning effort ( $r = .268, p < .01$ ). There was a small positive correlation between imagination capacity and DMC disposition ( $r = .225, p < .01$ ) which was also statistically significant. Finally, the ideal L2 self of the participants was positively correlated with their DMC dispositions ( $r = .217, p < .01$ ) though the magnitude of the correlation coefficient was small (Cohen, 1988).

A close investigation of the relationship among the independent variables displayed that the largest positive correlation was found between L2 learning effort and self-regulated strategy use of the participants ( $r = .679, p < .01$ ). Self-regulated strategy use was also shown to be positively and moderately correlated with ideal L2 self ( $r = .371, p < .01$ ), and imagination capacity ( $r = .314, p < .01$ ). A small correlation can be viewed in the table between L2 learning effort and imagination capacity ( $r = .244, p < .01$ ). Ideal L2 self of the participants was in significant positive correlation ( $r = .252, p < .01$ ) with L2 learning effort.

Finally, the imagination capacity of the tertiary-level EFL learners was shown to be positively and significantly correlated with their ideal L2 self ( $r = .396, p < .01$ ) at a moderate level (Cohen, 1988).

***Research Question 3: What are the interaction effects among Turkish EFL learners' DMC dispositions and the related ID factors (self-regulated strategy use, L2 learning effort, ideal L2 self, and imagination capacity) based on the literature-based hypothesized model (Figure 1)?***

To answer the third research question, path analysis preceded by confirmatory factor analysis (CFA) was conducted. Before these inferential statistical analyses, data were cautiously screened and preliminary analyses were conducted.

### ***Preliminary Analyses***

**Analyses for Missing Value and Outliers.** First, univariate outliers were checked and removed from the data. The data were closely investigated for multivariate outliers as well, and Mahalanobis distance was calculated via IBM SPSS Statistics. Findings revealed that no cases were out of the critical Chi-square distance ( $p < .001$ ) (Tabachnick & Fidell, 2007). Thus the sample size remained as it was in that step. The linearity of the data was checked through the scatterplots of all variables. Since no curvilinear relationships were observed, it was ensured that the linearity assumption was not violated.

Missing data were handled via mean score insertion. According to Tabachnick and Fidell (2007) "If only a few data points, say, 5% or less, are missing in a random pattern from a large data set, the problems are less serious and almost any procedure for handling missing values yields similar results." (p. 63). A considerably big sample size was present for this study ( $N = 305$ ) and the percentage of missing data was calculated to be less than %1. Moreover, the missing data was observed not to be in a systematic pattern for any of the scale items. Thus, mean score insertion for the missing data was an applicable solution for this study.

Finally, the assumption of normality was tested using IBM SPSS Statistics. The following section presents detailed information regarding the normality analyses.

**Assessing the Normality of Data.** As a preliminary assumption for path analyses, data were scrutinized for normality. To determine it, initially, Kolmogorov-Smirnov and Shapiro-Wilk tests of normality were conducted. Table 8 below presents an overview of the results.

**Table 8***Tests of Normality*

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
DMC	.10	305	.000	.97	305	.00
SR	.04	305	.200*	.99	305	.443
Effort	.04	305	.200*	.99	305	.345
Imagery	.12	305	.000	.92	305	.000
Ideal L2 self	.13	305	.000	.90	305	.000

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

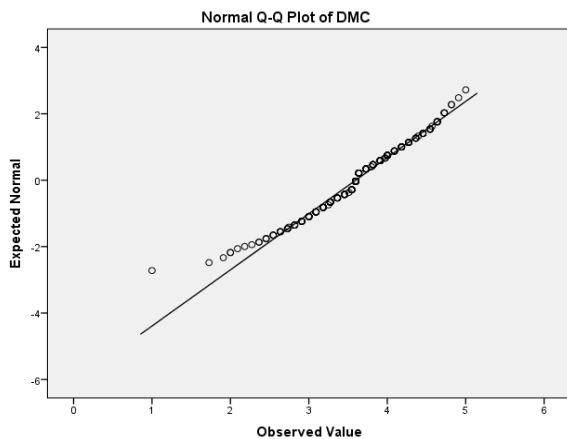
According to the results of the tests, self-regulated strategy use and L2 learning effort scales provided normally distributed data. Non-significant results ( $p > .05$ ) were observed for them suggesting normal distribution. On the other hand, DMC dispositions, imagery capacity, and ideal L2 self data were in a non-normal distribution since the test results were significant ( $p < .05$ ) indicating the violation of the normality assumption. However, Pallant (2010) states that these tests tend to usually reveal non-normally distributed data with large sample sizes, and there is a need for further investigation via histograms or normal probability plots (Q-Q plots) to figure out the real shape of findings. Considering that the current study also had a pretty large sample group ( $N = 305$ ), Q-Q plots were examined to be certain about the distribution of the data.

A close investigation of Q-Q plots for each scale suggested normal distribution with perfect or reasonably straight lines. The following figures display the results for each variable.

Figure 3 below shows the normal probability plots of DMC disposition. It is apparent in the figure that DMC disposition data has an acceptable straight line which means that the data seems to have a normal distribution.

**Figure 3**

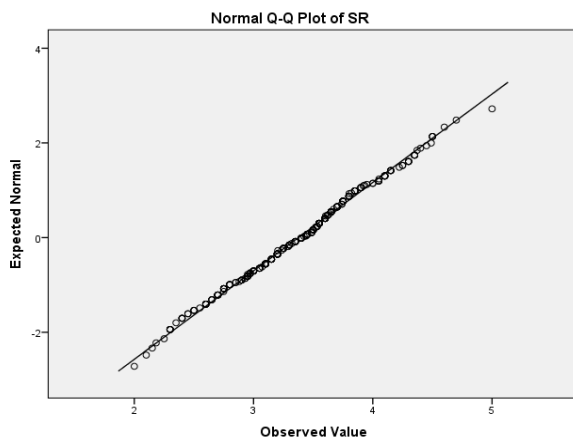
*Normal Probability Plots of DMC Disposition Scale*



The data in Figure 4 regarding the self-regulated strategy use of the participants is also normally distributed with a nearly perfect straight line suggesting no deviations.

**Figure 4**

*Normal Probability Plots of Self-regulated Strategy Use Scale*

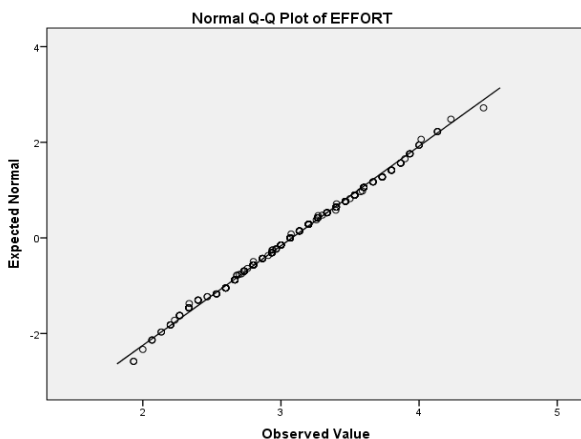




In Figure 5, a perfectly normal distribution can be observed. The scores of the L2 learning effort test are entirely on a straight line with nearly no deviations. This is a very clear demonstration of normal distribution

**Figure 5**

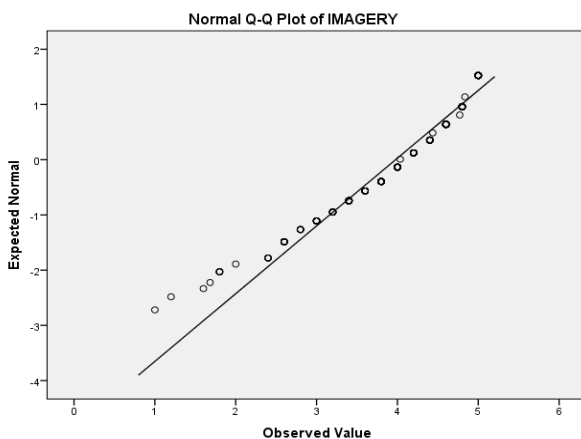
*Normal Probability Plots of L2 Learning Effort Scale*



Q-Q plots of the participants' imagination capacity test are presented below in Figure 6. As shown in the figure, some minor deviations from the straight line are available. However, as the scores are still on a straight line to a large extent, the data appears to be in a normal distribution.

**Figure 6**

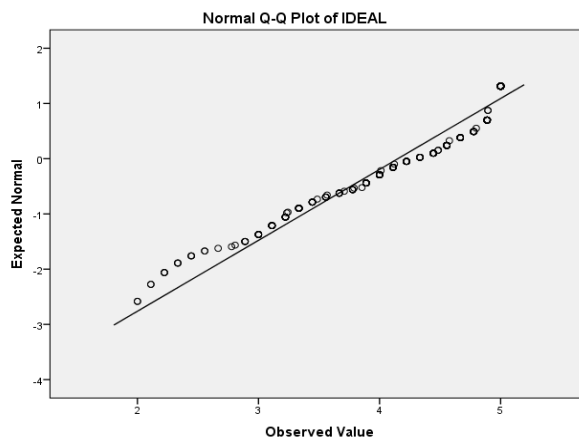
*Normal Probability Plots of Imagination Capacity Scale*



Similar to imagination capacity data, the ideal L2 self test in Figure 7 also shows some minor deviations though the data seems to be mainly on a straight line. It can be asserted that the ideal L2 self scale provided normally distributed data for the current study.

**Figure 7**

*Normal Probability Plots of Ideal L2 Self Scale*



Although the Kolmogorov-Smirnov and Shapiro-Wilk tests discovered numerical results of non-normal distribution for some of the scales, the visuals of normality tests (Q-Q plots) demonstrated normal distribution for them. Moreover, skewness and kurtosis scores were examined for the variables and as can be viewed in Table 9 below, results showed that the values were between +2 and -2 (Kunnan, 1998) signifying a normal distribution for each specific scale.

**Table 9**

*Descriptive Statistics: Skewness and Kurtosis*

	Mean	SD	Skewness	Kurtosis
DMC	3.38	.61	-.500	1.268

---

SR	3.32	.54	-.006	-.111
Effort	3.17	.48	.048	-.304
Imagery	3.97	.82	-.882	.546
Ideal L2 Self	4.13	.78	-.737	-.335

---

### ***Exploring the Construct Validity of the Scales***

As a preliminary for path analysis, the construct validity of the scales was examined through confirmatory factor analysis (CFA). Construct validity refers to how well the measured variables are representative of the theoretical constructs (Hair, Black, Babin, Anderson, & Tatham, 2006). Confirmatory factor analysis (CFA) is conducted to investigate the relationship between the underlying variables and the construct (Hair et.al, 2006). It is a complex technique involving observed and latent variables and theory-based hypotheses (Pallant, 2010). As stated by Tabachnick and Fidell (2007) "It is comforting to have at least 300 cases for factor analysis' (p. 613). The sample size of 305 was sufficient for CFA and it was conducted for the five scales in this study. IBM SPSS AMOS software was utilized.

The assumptions of linearity and normality were tested using IBM SPSS Statistics and missing data were treated via mean score insertion. Then, indices of goodness-of-fit such as degrees of freedom ratio ( $X^2/df$ ), the Goodness-of-Fit Index (GFI), Adjusted Goodness-of-Fit Index (AGFI), the Comparative Fit Index (CFI), and the Root Mean Square Error of Approximation (RMSEA) were administered for each scale. In the table below (see Table 10), the fit indices and satisfactory threshold values for them were listed.

**Table 10***Fit Indices and Recommended Values*

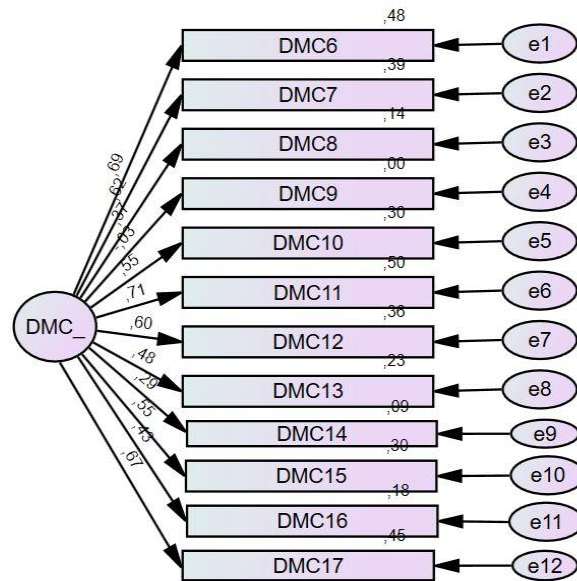
Fit index	Recommended value	Reference
X <sup>2</sup> /df	5 or less	Tabachnick and Fidell, 2007
GFI	0.90 and above	Byrne, 2013; Thompson, 2000
AGFI	0.90 and above	Byrne, 2013; Thompson, 2000
CFI	0.90 and above	Byrne, 2013; Thompson, 2000
RMSEA	0.08 or less	Browne & Cudeck, 1993; Byrne, 2013

First of all, the DMC disposition scale was put into analysis. The results of the CFA for the variable can be viewed in Figures 8 and 9 below. Figure 8 represents the original measurement model while Figure 9 is designed for the revised version of it as a result of the modifications conducted to reach acceptable model fit values for the data. The loading coefficients based on standardized estimates were displayed for both of them.

Figure 8 illustrates that the factor loadings for two items (-.03 for DMC9 and .29 for DMC14) appeared to be problematic in the original measurement model since they were below the cut-off point (.32) (Tabachnick & Fidell, 2007). In addition, the item named DMC9 did not load significantly at  $p < .05$  level. For all the other items significant factor loadings were observed with scores ranging from .37 to .71, all above the cut-off point.

**Figure 8**

*Results of the CFA for DMC (Standardized Coefficients)*



The Chi-square, GFI, AGFI, CFI, and RMSEA were also calculated for the scale.

Table 11 below summarizes the model fit indices.

**Table 11**

*Fit Indices of the DMC Disposition Scale*

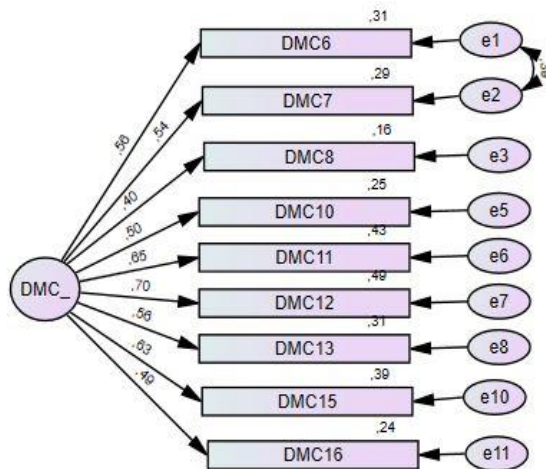
Scale	$\chi^2$	df	$\chi^2/df$	GFI	AGFI	CFI	RMSEA
DMC disposition	296.66	54	5.49	.83	.76	.74	.12

*Note:  $\chi^2$  = chi-square; df = degrees of freedom; GFI = goodness-of-fit index; AGFI = adjusted goodness-of-fit index; CFI = comparative fit index; RMSEA = root mean square error of approximation*

As shown in the table, the  $\chi^2/df$  ratio was 5.49, above the cut-off point of 5. GFI and AGFI scores were .83 and .76 respectively, less than the acceptable cut-off score of .90. The fit index for CFI (.74) was also not acceptable since it was below .90. Finally, the RMSEA was calculated to be .12, above the recommended threshold value of .05. As indicated in Table 11, the measurement model did not represent recommended model fit scores, and for that reason, modifications were needed.

**Figure 9**

*Results of the CFA for DMC after Modifications (Standardized Coefficients)*



To attain acceptable model fit values, three items were omitted from the scale. Initially, DMC9 was omitted since it did not load significantly and DMC14 was omitted as its loading score was below the acceptable cut-off point of .32. Then, DMC17 was suggested by the software to be excluded to reach the criteria for adequacy. A closer investigation of the item showed that it was largely correlated with DMC11 ( $r = .561, p < .01$ ) possibly suggesting that they were quite similar in what they were measuring. Thus, it was also excluded from the measurement model. To improve the measurement model, a covariance was also drawn between the error terms of e1 - e2. It was observed that e1 and e2 belonged to scale items that were largely correlated ( $r = .575, p < .01$ ). Thus, it could be speculated that these items were suggested to be covaried since they were measuring relatively related statements. Following the modifications, standardized coefficients were scrutinized again and it was revealed that scale items had significant factor loadings between .40 and .70, all above the cut-off point of .32. The fit indices also showed a good fit of the model to the data. Finally, the t-values for the items varied from 5.61 to 9.20 exceeding the cut-off value of  $\pm 1.96$  (Jöreskog & Sörbom, 1993). Table 12 below represents the fit indices of the DMC scale after modifications.

**Table 12***Fit indices of the DMC Disposition Scale after Modifications*

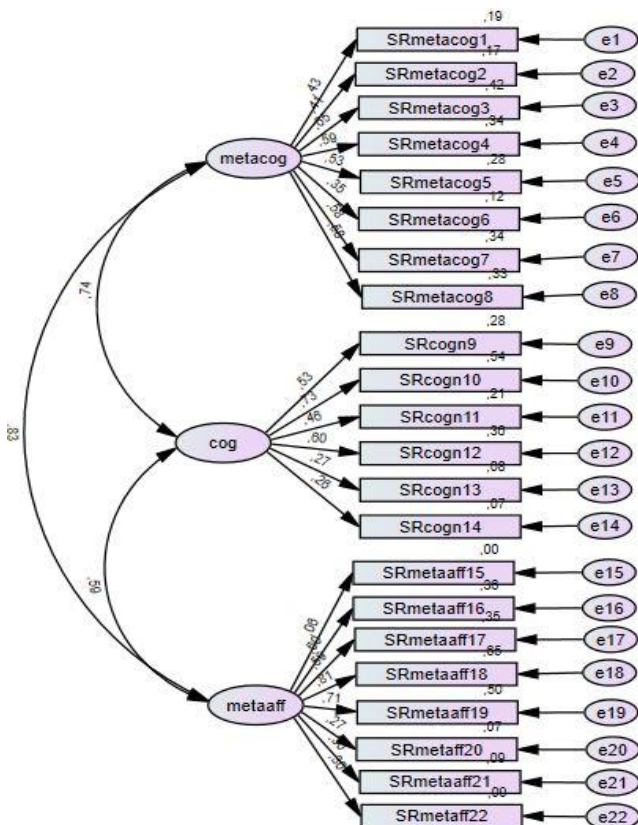
Scale	$\chi^2$	df	$\chi^2/df$	GFI	AGFI	CFI	RMSEA
DMC disposition	82.018	25	3.28	.94	.90	.91	.08

Note:  $\chi^2$  = chi-square; df = degrees of freedom; GFI = goodness-of-fit index; AGFI = adjusted goodness-of-fit index; CFI = comparative fit index; RMSEA = root mean square error of approximation

As indicated in Table 12, the  $\chi^2/df$  ratio was 3.28, less than the cut-off value of 5. The GFI was .94 and AGFI seemed to be .90 both signifying an acceptable fit to the data. The CFI value was .91 which was also satisfactory and finally, the RMSEA was calculated to be .08 which was acceptable though not perfect. To conclude, after the modifications conducted for the DMC disposition scale, CFA analysis revealed a good model fit.

As a second step, the self-regulated strategy use scale was put into confirmatory factor analysis with a three-factor measurement model. Figures 10 and 11 demonstrate standardized factor loadings respectively for the original and revised measurement models. It is seen in Figure 10 below that there are loading coefficients less than .32 which is the recommended cut-off point (Tabachnick & Fidell, 2007). To examine the items with low factor loadings, significance scores were checked. It was discovered that the loading coefficients of the scale items SRmetaaff15, SRmetaaff20, SRmetaaff21, and SRmetaaff22 for meta-affective strategy use were all insignificant ( $p > .05$ ). Thus, it was deduced that these items were not successful in measuring the intended construct. In addition, the items named SRCog13 and SRCog14 referring to cognitive strategy use also had loading coefficients lower than .32; however, the analysis of significance indicated that they were both significant in terms of factor loading scores ( $p < .05$ )

**Figure 10***Results of the CFA for Self-regulated Strategy Use Scale (Standardized Coefficients)*



To analyze the model further, Chi-square, GFI, AGFI, CFI, and RMSEA were calculated. Table 13 below summarized the model fit indices for the scale.

**Table 13**

*Fit Indices of the Self-regulated Strategy Use Scale*

Scale	X <sup>2</sup>	df	X <sup>2</sup> /df	GFI	AGFI	CFI	RMSEA
Self-regulated strategy use	601.60	206	2.92	.83	.79	.75	.07

*Note: X<sup>2</sup> = chi-square; df = degrees of freedom; GFI = goodness-of-fit index; AGFI = adjusted goodness-of-fit index; CFI = comparative fit index; RMSEA = root mean square error of approximation*

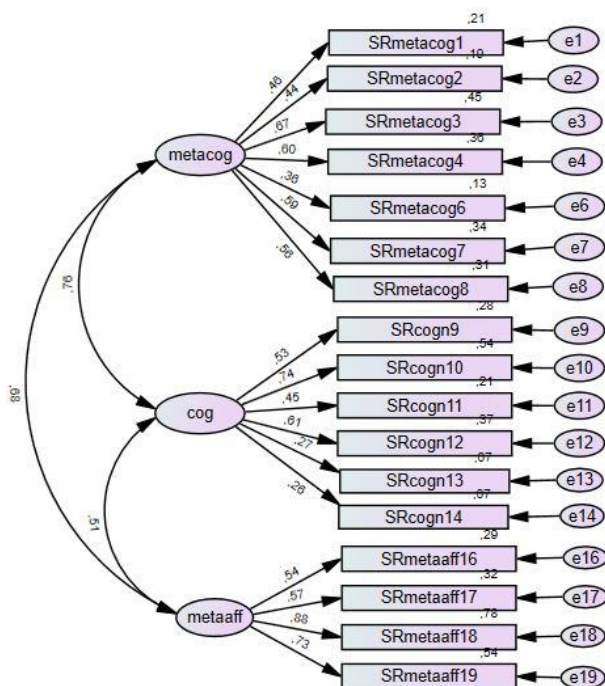
The table shows that the X<sup>2</sup>/df ratio was 2.92 which is perfect and the RMSEA score was .07 which is acceptable. However, the GFI (.83), AGFI (.79), and CFI (.75) scores were all less than .90 which is the recommended cut-off value for them (Byrne, 2013; Thompson, 2000). The results suggested that the model did not fit the data well.



Due to the low and insignificant loading coefficients indicated in Figure 10 and the unacceptable model fit indices reported in Table 13, it was clear that modifications were needed in the measurement model.

**Figure 11**

*Results of the CFA for Self-regulated Strategy Use Scale after Modifications  
(Standardized Coefficients)*



Initially, the items which appeared to have low (< .32) and insignificant (> .05) factor loading scores, specifically, SRmetaaff15, SRmetaaff20, SRmetaaff21, and SRmetaaff22 were deleted from the data. Since the model still did not fit the data, SRmetacog5 which belonged to metacognitive strategy use preference was suggested by the software to be omitted. A close investigation of the item showed that it was largely correlated with item SRmetaaff19 ( $r = .673, p < .01$ ) and they were both referring to the use of planning as a learning strategy. It was noteworthy that SRmetaaff19 had a higher factor loading coefficient score than SRmetacog5. Due to their large correlation and the comOyalty in their target strategy, SRmetacog5 was omitted from the scale and perfect model fit indices were attained. Although the items named SRCog13 and SRCog14

referring to cognitive strategy use had loading coefficients lower than .32, their t-values were above the cut-off value of  $\pm 1.96$  and they had significant loading coefficients. They also did not harm the model fit indices, thus they were kept in the model. Finally, the t-values were scrutinized for each scale item and the results showed that they varied from 3.80 to 9.21, above the cut-off value of  $\pm 1.96$  (Jöreskog & Sörbom, 1993). Table 14 below reports the fit indices for the modified version of the scale.

**Table 14**

*Fit Indices of the Self-regulated Strategy Use Scale after Modifications*

Scale	$X^2$	df	$X^2/df$	GFI	AGFI	CFI	RMSEA
Self-regulated strategy use	210.54	115	1.83	.92	.90	.92	.05

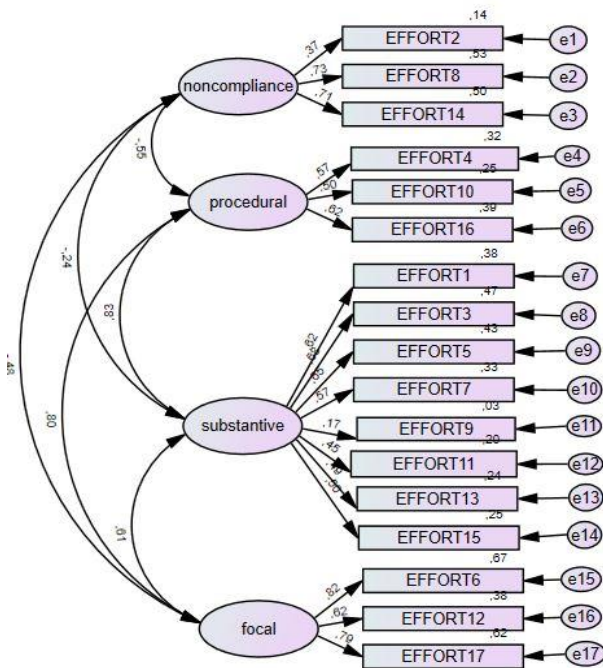
*Note:  $X^2$  = chi-square; df = degrees of freedom; GFI = goodness-of-fit index; AGFI = adjusted goodness-of-fit index; CFI = comparative fit index; RMSEA = root mean square error of approximation*

It can be viewed in the table that the  $X^2/df$  ratio was 1.83 which is totally perfect. The GFI (.92), AGFI (.90), and CFI (.92) scores were adequate since they were all above .90 suggesting a perfect fit. The RMSEA score seemed to be .05 which also indicated a perfect fit of the model to the data. In sum, the fit indices demonstrated that the modified model confirms the construct validity of the self-regulated strategy use scale.

The L2 learning effort scale was put into CFA with a four-factor structure. Figures 12 and 13 show the standardized coefficients for the original measurement model and the revised model.

**Figure 12**

*Results of the CFA for L2 Learning Effort Scale (Standardized Coefficients)*



An analysis of standardized coefficients in the original model displayed that only the item termed Effort9 had a loading value less than .32, the cut-off point. The scores ranged from .37 to .82 for the others. Then, Chi-square, GFI, AGFI, CFI, and RMSEA were computed, and findings revealed unacceptable fit indices, reported in Table 15 below.

**Table 15**  
*Fit Indices of the L2 Learning Effort Scale*

Scale	X <sup>2</sup>	df	X <sup>2</sup> /df	GFI	AGFI	CFI	RMSEA
L2 Effort	334.44	113	2.96	.87	.83	.84	.08

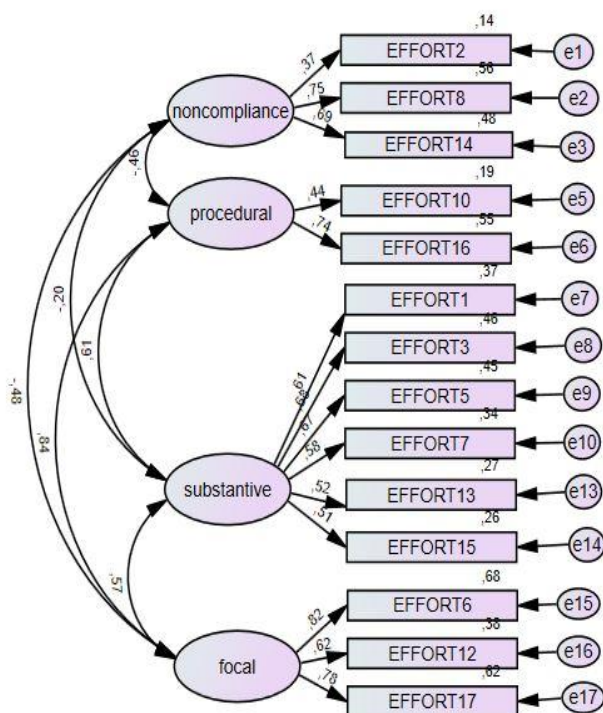
Note: X<sup>2</sup> = chi-square; df = degrees of freedom; GFI = goodness-of-fit index; AGFI = adjusted goodness-of-fit index; CFI = comparative fit index; RMSEA = root mean square error of approximation

According to the table, the X<sup>2</sup>/df ratio was 2.96, substantially less than the cut-off value of 5. However, GFI was .87, AGFI was .83 and CFI was calculated to be .84 all below the recommended minimum score of .90. The RMSEA score was .08 which was

acceptable. As evident in the table, while some of the results represented good fit indices, others were not acceptable. Thus, modifications were required for the original model.

**Figure 13**

*Results of the CFA for L2 Learning Effort Scale after Modifications (Standardized Coefficients)*



To revise the model, initially, Effort9 which had a low factor loading was omitted. Then, the suggestions by the software were consulted and scrutinized. The scale item named Effort4 was suggested by the software to be deleted. A close investigation of the item showed that Effort4 and Effort10 were highly related. While Effort4 was worded as “I do my homework on time.”, the item called Effort10 was “I submit my homework on time.”. The correlation coefficient score between them was also computed and it was confirmed to be moderate ( $r = .442, p < .01$ ). Hence, Effort4 was deleted and the fit indices appeared to improve, though still not acceptable. To reach good fit indices, finally, Effort11 was proposed to be excluded from the analysis and following that step, the model seemed to

fit the data quite well. Table 16 below shows the fit indices of the modified measurement model.

**Table 16**

*Fit Indices of the L2 Learning Effort Scale after Modifications*

Scale	$\chi^2$	df	$\chi^2/df$	GFI	AGFI	CFI	RMSEA
L2 Effort	171.52	71	2.41	.92	.89	.91	.06

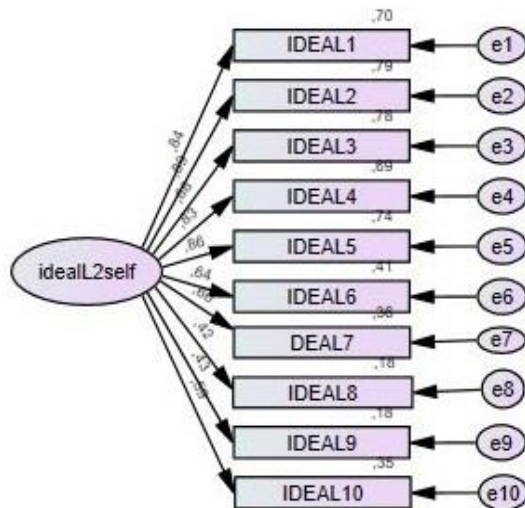
*Note:  $\chi^2$  = chi-square; df = degrees of freedom; GFI = goodness-of-fit index; AGFI = adjusted goodness-of-fit index; CFI = comparative fit index; RMSEA = root mean square error of approximation*

As shown in the table, the  $\chi^2/df$  ratio was 2.41, suggesting a perfect model fit. GFI was increased to .92 and CFI was .91, both of which improved significantly as a result of the revisions. Though the AGFI score was also increased to .89, it could not exceed the cut-off value of .90. The RMSEA was calculated to be .06, which suggested a perfect model fit. Since all of the fit indices were perfect except for the AGFI score, it could be asserted that the model fit the data adequately. Finally, the t-values for the items were examined and the results indicated that they varied from 5.10 to 13.11 exceeding the cut-off value of  $\pm 1.96$  (Jöreskog & Sörbom, 1993) and suggesting a good model fit.

Another independent variable in the study was the ideal L2 self of the tertiary-level EFL learners and it was analyzed statistically for construct validity. The standardized loading coefficients of the original measurement model and modified model can be viewed below in Figures 14 and 15. As depicted in Figure 14, the standardized coefficient scores range from .42 to .89, which are all above the cut-off point of .32 (Tabachnick & Fidell, 2007).

**Figure 14**

*Results of the CFA for Ideal L2 Self Scale (Standardized Coefficients)*



Following the close inspection of loading coefficients, the tests of Chi-square, GFI, AGFI, CFI, and RMSEA were computed. Findings revealed unacceptable fit indices, displayed in Table 17 below.

**Table 17**

*Fit Indices of the Ideal L2 Self Scale*

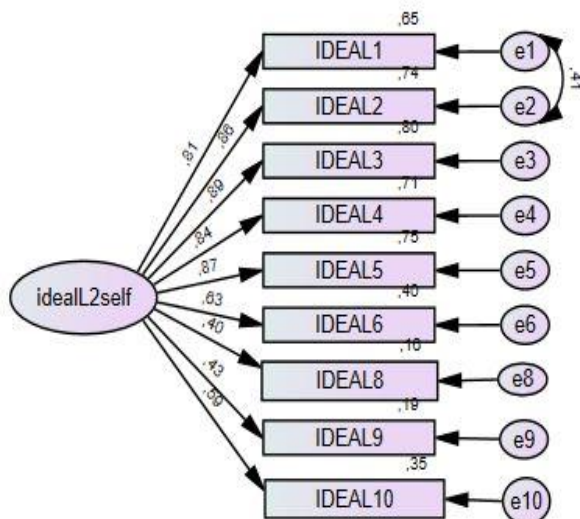
Scale	$\chi^2$	df	$\chi^2/df$	GFI	AGFI	CFI	RMSEA
Ideal L2 self	298.588	35	8.53	.82	.72	.86	.15

*Note:  $\chi^2$  = chi-square; df = degrees of freedom; GFI = goodness-of-fit index; AGFI = adjusted goodness-of-fit index; CFI = comparative fit index; RMSEA = root mean square error of approximation*

According to the table, the  $\chi^2/df$  ratio of the original measurement model was 8.53, quite above the cut-off point of 5 suggesting a poor model fit. The GFI was found to be .82, the AGFI was .72, and the CFI was .86 all of which were below the recommended cut-off value of .90. Lastly, the RMSEA appeared to be .15, higher than the acceptable cut-off value of .08. In brief, it can be seen in the table that the model did not meet the criteria for adequacy of fit. Thus, modifications were imperative for the original model.

**Figure 15**

*Results of the CFA for Ideal L2 Self Scale after Modifications (Standardized Coefficients)*



To improve the model, the items were scrutinized in relation to each other and the one named Ideal7 was deleted due to its large correlation with Ideal8 ( $r = .579, p < .01$ ). When the two items were analyzed verbally, it was realized that they were pretty identical. Ideal7 stated “Whenever I think of my future career, I imagine myself using English.” and Ideal8 was “The things I want to do in the future require me to use English.”. Thus, it would be sensible to delete one. Since the model still did not reach acceptable fit indices, further investigations were conducted. Taking the suggestions of the software into consideration as well, a covariance was created between the error terms of e1 and e2 ( $r = .818, p < .01$ ) because of their very large correlation with each other. In the cases where covarying items would help increase the fit indices, omitting items was not preferred. In line with this inclination, the items listed above were covaried rather than excluding one of them from the model. The fit indices of the ideal L2 self scale after the modifications were reported below in Table 18.

**Table 18**

*Fit Indices of the Ideal L2 Self Scale after Modifications*

Scale	$\chi^2$	df	$\chi^2/df$	GFI	AGFI	CFI	RMSEA
Ideal L2 self	97.859	25	3.91	.94	.89	.96	.08

Note:  $X^2$  = chi-square; *df* = degrees of freedom; *GFI* = goodness-of-fit index; *AGFI* = adjusted goodness-of-fit index; *CFI* = comparative fit index; *RMSEA* = root mean square error of approximation

As shown in the table above, the  $X^2/df$  ratio was 3.91 which shows a perfect fit. The *GFI* was .94, above the cut-off point of .90. The *AGFI* was .89 which was not perfect but acceptable since it was just a borderline score and the other indices were all acceptable. The *CFI* was .96 signifying a perfect fit and finally, the *RMSEA* was measured to be .08 which suggests a good fit. In sum, the modifications resulted in better fit indices between the measurement model and the data. Finally, the *t*-values for the scale items were computed to vary from 7.05 to 22.92, greater than the cut-off value of  $\pm 1.96$  (Jöreskog & Sörbom, 1993).

Lastly, the imagination capacity scale was put into CFA to ensure its construct validity. Figures 16 and 17 below show the standardized loading coefficients for the original and modified measurement models.

**Figure 16**

*Results of the CFA for Imagination Capacity Scale (Standardized Coefficients)*

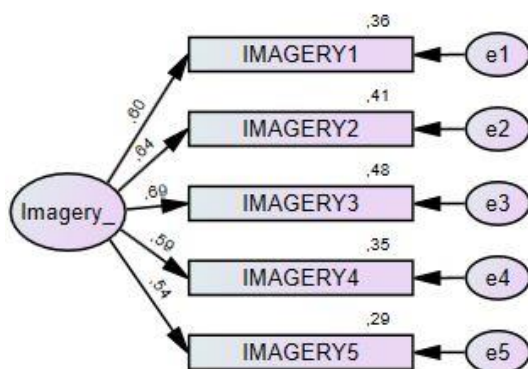


Figure 16 presented that the loading coefficient scores of the items ranged from .54 to .69 and they were statistically significant. The statistical analysis for Chi-square, *GFI*, *AGFI*, *CFI*, and *RMSEA* were also conducted and the findings were reported in Table 19 below.



**Table 19**

*Fit Indices of the Imagination Capacity Scale*

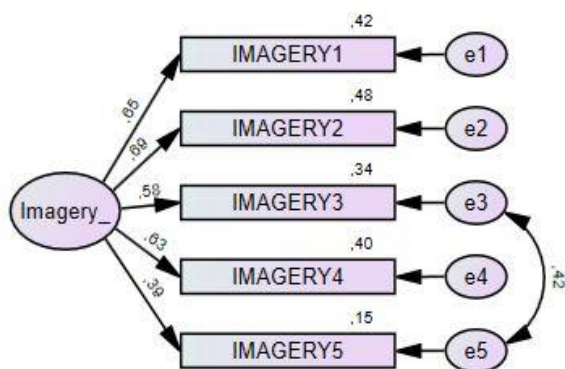
Scale	X <sup>2</sup>	df	X <sup>2</sup> /df	GFI	AGFI	CFI	RMSEA
Imagination capacity	44.777	5	8.95	.93	.81	.88	.16

Note: X<sup>2</sup> = chi-square; df = degrees of freedom; GFI = goodness-of-fit index; AGFI = adjusted goodness-of-fit index; CFI = comparative fit index; RMSEA = root mean square error of approximation

According to the table, the X<sup>2</sup>/df ratio was 8.95, above the cut-off point of 5. Thus, it showed a poor model fit. The GFI was .93, at a perfect level. However, the AGFI and CFI were respectively .81 and .88, below the cut-off point of .90 and showing a poor model fit. The RMSEA also signaled a poor fit since it was .16, above the recommended cut-off point of .08. Based on these results, it was clear that modifications were needed.

**Figure 17**

*Results of the CFA for Imagination Capacity Scale after Modifications (Standardized Coefficients)*



To improve the model, items named Imagery3 and Imagery5 were covaried due to the large correlation between them ( $r = .542, p < .01$ ). Conducting the tests for adequacy of fit again, it was observed that the specified measurement model fit the data perfectly.

**Table 20***Fit Indices of the Imagination Capacity Scale after Modifications*

Scale	$X^2$	df	$X^2/df$	GFI	AGFI	CFI	RMSEA
Imagination capacity	1.63	4	.40	.99	.99	1.00	.00

Note:  $X^2$  = chi-square; df = degrees of freedom; GFI = goodness-of-fit index; AGFI = adjusted goodness-of-fit index; CFI = comparative fit index; RMSEA = root mean square error of approximation

As reported in the table, the  $X^2/df$  ratio was .40, below the cut-off point of 5. The GFI and AGFI were .99, the CFI was 1.00. They were all above the recommended threshold point of .90, thus they could be stated to be simply perfect. The RMSEA was .00 and it also signified a perfect model fit. Finally, the t-values for the scale items were examined and they were observed to vary from 5.35 to 8.19, above the cut-off value of  $\pm 1.96$  (Jöreskog & Sörbom, 1993).

In sum, all of the scales used in the current study were confirmed to have construct validity based on their factor loading coefficients, the fit indices, and t-values. In the table below the fit indices of each scale were summarized and also the reliability coefficients of the modified scales were presented to ensure their internal consistency.

**Table 21***A Summary of the Psychometric Properties of the Scales*

Scale	$X^2/df$	GFI	AGFI	CFI	RMSEA	$\alpha$	CR
DMC disposition	3.28	.94	.90	.91	.08	.82	.80
Self-regulated strategy use	1.83	.92	.90	.92	.05	.83	.88
Language learning effort	2.41	.92	.89	.91	.06	.70	.89

Ideal L2 self	3.91	.94	.89	.96	.08	.89	.90
Imagination capacity	.40	.99	.99	1.00	.00	.75	.73

Following the statistical analysis of construct validity and internal consistency, further inferential statistics, namely path analysis, was appropriate to be performed.

### ***Path Analysis***

#### ***Research Question 3: What are the interaction effects among Turkish EFL learners' DMC dispositions and the related ID factors (self-regulated strategy use, L2 learning effort, ideal L2 self, and imagination capacity) based on the literature-based hypothesized model (Figure 1)?***

This research question aimed to investigate the structural relationship between the learners' DMC dispositions, self-regulated strategy use, L2 learning effort, imagery capacity, and ideal L2 self via path analysis. The hypothesized model to be tested was created based on the literature. Both direct and indirect effects with multiple mediators were estimated among the variables. Multiple mediator models were suggested to be more advantageous than separate single mediation models by Preacher and Hayes (2008). They stated that testing multiple mediators in one model allows seeing the mediation effect of each variable in the presence of the others. To do so, a complex model was suggested to be tested by the researcher (see Figure 18).

The maximum likelihood estimation method was utilized since it was the most common for path analysis. The model fit indices including degrees of freedom ratio ( $X^2/df$ ), the Goodness-of-Fit Index (GFI), the Adjusted Goodness-of-Fit Index (AGFI), the Comparative Fit Index (CFI), and the Root Mean Square Error of Approximation (RMSEA) were administered. Path coefficients were examined and the significance levels of both direct and indirect paths were checked via two-tailed tests. T-values ( $\geq \pm 1.96$ , Jöreskog & Sörbom, 1993) and p-values ( $\leq .05$ ) were the criteria for the significance of direct paths.

Bootstrapping, which is a process of creating replications from the data to compute the significance of the indirect effects, was used (set at 2000) (Tabachnick & Fidell, 2012).

**Table 22**

*The Goodness of Fit Statistics of the Hypothesized Model*

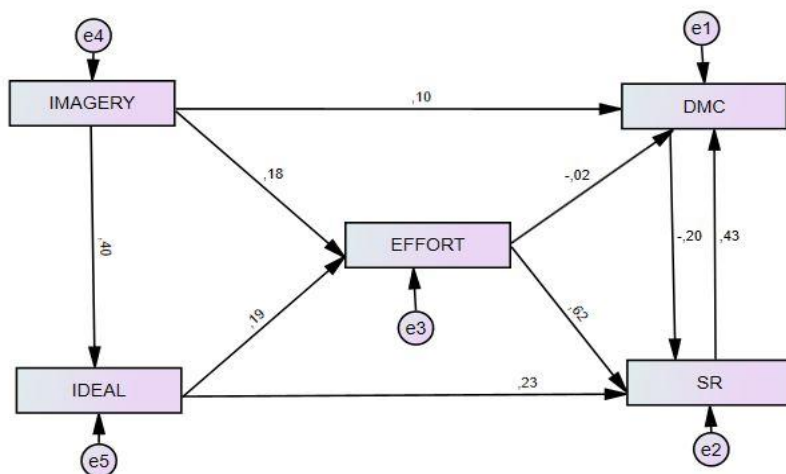
	X <sup>2</sup>	df	X <sup>2</sup> /df	GFI	AGFI	CFI	RMSEA
Hypothesized model	.481	1	.48	.99	.98	1.00	.00

*Note: X<sup>2</sup> = chi-square; df = degrees of freedom; GFI = goodness-of-fit index; AGFI = adjusted goodness-of-fit index; CFI = comparative fit index; RMSEA = root mean square error of approximation*

A close inquiry of the suggested model provided perfect goodness-of-fit values. The X<sup>2</sup>/ratio was .48, which was below the cut-off point of 5. GFI was .99, AGFI was found to be .98, CFI was 1.00, and finally, RMSEA appeared to be .00, all suggesting an overall fit to the data (see Table 22 above). However, the path coefficients, t-values, and significance scores revealed that the hypothesized model needed to be trimmed since one path coefficient was not statistically significant.

**Figure 18**

*The Path Coefficients of the Hypothesized Model*



Note: IMAGERY = Imagination Capacity; IDEAL = Ideal L2 Self; EFFORT = Language Learning Effort; DMC = Directed Motivational Currents Dispositions; SR = Self-regulated Strategy Use. Standardized coefficients are displayed in the figures.

The path leading from DMC disposition to self-regulated strategy use appeared to be non-significant. The t-value for it was -1.05, below the cut-off score of  $\pm 1.96$  (Jöreskog & Sörbom, 1993). Thus, it was omitted from the model and the model was tested again. After the modification, the goodness of fit statistics provided perfect results again and the path coefficients were all at statistically significant levels. The results for the trimmed model can be seen in Table 23 below.

**Table 23**

*The Goodness of Fit Statistics of the Modified Model*

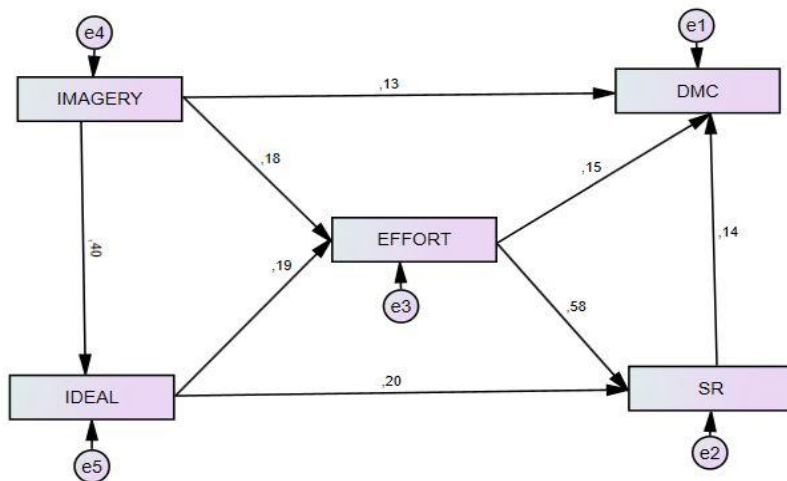
	$X^2$	df	$X^2/df$	GFI	AGFI	CFI	RMSEA
Modified model	1.580	2	.79	.99	.98	1.00	.00

Note:  $X^2$  = chi-square; df = degrees of freedom; GFI = goodness-of-fit index; AGFI = adjusted goodness-of-fit index; CFI = comparative fit index; RMSEA = root mean square error of approximation

As shown in the table above, the  $X^2/df$  ratio was .79 and GFI was computed to be .99 which showed a perfect fit to the data. AGFI was .98 suggesting a perfect fit as well. CFI was 1.00 and RMSEA was found to be .00, both indicating that the model and the data were a perfect fit. The t-statistics for the new paths provided scores ranging from 1.97 to 12.95 suggesting that they were all significant. The trimmed model can be observed in Figure 19 below.

**Figure 19**

*The Structural Model of DMC (Final Model)*



Note: IMAGERY = Imagination Capacity; IDEAL = Ideal L2 Self; EFFORT = Language Learning Effort; DMC = Directed Motivational Currents Dispositions; SR = Self-regulated Strategy Use. Standardized coefficients are displayed in the figures.

To investigate the interactions among the variables further, standardized direct and indirect effects were calculated. While a direct effect refers to direct paths between the variables, for the indirect effects between two variables, mediation of another variable is needed (Kline, 2005). The total effect is calculated by summing up the direct and indirect effects. To illustrate, the direct effect of the ideal L2 self on self-regulated strategy use was .20. Ideal L2 self had an indirect effect as well on self-regulated strategy use via its effect on language learning effort (.19 x .58=.11). Thus the total effect of ideal L2 self on self-regulated strategy use was .31 (.20 + .11 = .31). Table 24 below summarizes the findings for the final model.

**Table 24**

*Standardized Direct, Indirect, and Total Effects in the Final Model*

Path	Direct effect	Indirect effect	Total effect
Language learning effort → DMC	.15	.08	.23
Imagery → DMC	.13	.06	.19

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Self-regulated strategy use → DMC	.14		.14
Ideal L2 self → DMC		.07	.07
Language learning effort → Self-regulated strategy use	.58		.58
Ideal L2 self → Self-regulated strategy use	.20	.11	.31
Imagery → Self-regulated strategy use		.22	.22
Imagery → Language learning effort	.18	.07	.25
Ideal L2 self → Language learning effort	.19		.19
Imagery → Ideal L2 self	.40		.40

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According to the table, language learning effort exerted the largest direct (.15) and indirect effects (.08) on DMC disposition. The indirect effect between them was through the mediating role of self-regulated strategy use. The imagery was the second strongest predictor of DMC with a total effect of .19. While the direct influence of imagery on DMC was .13, the indirect effect between them via the mediation of effort, ideal L2 self, and self-regulated strategy use was .06. It can be stated according to the model that language learning effort, ideal L2 self, and self-regulated strategy use play a significant role between the learners' imagination capacity and DMC dispositions. Self-regulated strategy use predicted DMC significantly and directly (.14) suggesting that the learners with high strategy use preferences were more prone to DMC experience. Finally, the ideal L2 self influenced DMC experience indirectly (.07), and the relationship between them was mediated via language learning effort and self-regulated strategy use.

Investigating the variables impacting self-regulated strategy use, language learning effort appeared to be the strongest one (.58) with a direct path. Thus, it can be stated that increased language learning effort leads to increased strategy preference by the learners.

Ideal L2 self had both direct (.20) and indirect (.11) effects on the self-regulated strategy use preference of the learners. The indirect relationship between them was through the mediating role of language learning efforts. The imagery was the final predictor of self-regulated strategy use. It exerted an indirect influence (.22) on self-regulation through the mediation of the ideal L2 self and language learning effort.

Language learning effort was strongly predicted by the imagination capacity of the learners both directly (.18) and indirectly (.07). The direct interaction between them implies that the learners who can create a strong image of their goals put more effort into the language learning process. The indirect path between them was through the ideal L2 self, so it can be inferred that improved imagination capacity leads to a better ideal L2 self, finally increasing the effort to learn the language. The direct path between the ideal L2 self and language learning effort was also strong and positive (.19). Finally, imagery exerted its largest direct influence on the ideal L2 self (.40). As the learners' imagination capacity increased, they could create a stronger ideal L2 self.

### **Qualitative Findings**

***Research Question 4: What do the participants report about their DMC experiences and self-regulated strategy use and language learning effort?***

- a. What are the characteristic features of DMC experiences in different DMC groups (e.g. DMC, DMC-like, No-DMC, and starting in DMC-like and ending up in No-DMC groups)?***
- b. Of the ID factors that have a direct impact on DMC, what are the roles of self-regulated strategy use and language learning effort in different DMC groups from the perspective of the participants?***

In this section findings obtained from qualitative data collection tools which were semi-structured first and follow-up interviews and language learning diaries will be presented. The first semi-structured interviews included questions to investigate the



reflections of DMC characteristics in each participant. Language learning diaries were formatted to get data regarding their language learning processes, specifically motivational and emotional states, use of certain strategies, and the amount of exerted effort. Lastly, follow-up interviews were conducted to get further information to complete and interpret previous data from the first interviews and language learning diaries.

The qualitative findings part will start with the characteristic features of DMC experiences (goal/vision orientedness, salient facilitative structure, and positive emotionality) in four different DMC groups which are DMC, DMC-like, No-DMC, and starting in DMC-like and ending up in NO-DMC groups. This section will be supported with motigraphs for each participant showing their motivational trajectories as well as their affective states and effort. The fluctuations in the motigraphs will be explained using the data from language learning diaries and follow-up interviews. In addition, language learning strategies applied in different DMC groups will be examined. The absence or presence of strategy use in different groups and the types of strategies preferred are expected to shed light on the relationship between DMC and strategy use. Finally, the language learning effort of the participants with different DMC experiences will be reported.

The findings of the quantitative data showed that self-regulated strategy use and language learning efforts had the largest direct effects on the DMC experience without any mediation of other variables. That is why they were investigated in more detail in the qualitative stage to see their role in DMC. In this subsection, the experiences of cases belonging to four different DMC-related groups will be reported thematically. Based on the data examined via content analysis, detailed descriptions will be provided for the cases and pseudonyms will be used while referring to them. Then, a visual representation of their motivational trajectories will be presented through motigraphs displaying their ups and downs. Motigraphs have been self-plotted by the participants bi-weekly and they were

accompanied by diaries. Thus, the graphic data will be clarified further using the diaries and follow-up interviews.

## **The Characteristic Features of Participants' DMC Experiences in Different Groups**

### ***The cases in the DMC group***

Two cases were identified with DMC-featured sustained motivation: Yunus and Ayşe. To start with introducing these two participants, Yunus was 19 years old and his department was Law. He was a real bookworm, and he could be described as an intellectual with a passion for improving himself, which were some of his salient characteristic features. Ayşe was a 22-year-old international student. She was in Turkey to have an MA degree. But, first, she had to study at prep-school to learn L2. She had studied at her first university in Somalia in her native language, thus she was not highly proficient in L2. In addition, she was an optimistic person trying to see a positive side in everything, which would contribute to her motivational experience to some extent.

In the following section, core features of a fully-fledged DMC experience reflected in both Yunus's and Ayşe's experiences, which are goal/vision orientedness, a salient facilitative structure, and positive emotionality, will be reported thematically.

**Goal/vision orientedness.** Both semi-structured interviews and language learning diaries revealed that Yunus and Ayşe could certainly be identified as learners in the unique current with their long-term and intense motivation and self-concordant goals. The most significant reason behind Yunus's experience was a strong desire to be the best in everything he focuses on. Since he was committed to learning L2 in prep-school, he had a vision of being the best in his classes and finally speaking English as his mother tongue. He did not have just a high motivation to learn the language but language learning was at the center of his life and he had already created a path in his mind with certain subgoals to reach his target goal:

First of all, I have a goal. My main goal is to speak English as my mother tongue. If we move to my secondary goals, for example, if I pass to the intermediate level, if God permits, I would like to finish the intermediate level ranking first in class. I wish the same thing for the upper-intermediate level. When we combine these goals, I already reach my main goal. (Yunus, First interview)

When asked about the initiation of his sustained motivation, his answer was quite noteworthy displaying that his goals are totally in line with his identity, which is a crucial component of the DMC state:

Usually, when I see normal people, I wonder why these people never read books and never try to be different. My biggest fear is to be an ordinary person. So, I always try to be the best in every job or task I do and I always try to do them efficiently. (Yunus, First interview)

The quotation above suggests that he alienates himself from people who do not read and improve themselves intellectually. He classifies them as “normal” people while he is an “unordinary” one from his point of view. It can be deduced here that he has the potential to experience DMC at different times of his life. Being unique is one of his passions and it is a part of his personality. If he invests time in a task or activity, he always desires to do it much better than everyone else and so stands out in the community he is surrounded with. Being different and visible among the crowd is precious to him, which can trigger his ongoing motivation quite easily.

The initiation of Ayşe’s intense motivation corresponds to the beginning of her prep-school education. Completing her master's classes successfully and then moving to the USA for better job opportunities were the goals that triggered her motivational experience. Since she had some relatives in the USA, she could make a realistic comparison between the job opportunities she could get there and in her country or Turkey, which was motivating for her (“A” stands for Ayşe, and “I” stands for Interviewer):

I: Why are you learning English? What is your goal?

A: To complete my master's classes because my master's classes will be in English. So that's the main point. And the second point is that when I finish my school or my master's degree, I want to go to the USA to work. My grandma also lives there. So, that's the second one. (Ayşe, First interview)

Ayşe was the oldest of four children in her family. Thus, she thinks that she needs to give financial support to her parents and siblings. It would be suitable to speculate that being the oldest child in the family requires taking care of the younger ones and the family in collectivist cultures (Hofstede, Hofstede, & Minkov, 2005). That is why Ayşe needs a good job for herself and also for her family. According to Hofstede et al. (2005), families in collectivist cultures tend to use every means available for the education of a person in the family with the expectation to have the income shared when that person graduates and gets a well-paid job. Coming from a collectivist nation, Ayşe's goals are in line with her culture and also the role she assigns herself in the family as a part of her identity, which refers to self-concordance. The extract below also supports that speculation:

A: Learning English is very important in my life because when I graduate I just, I want to go to America because my grandma lives there.

I: Okay, so why is going to the USA important for you?

A: Just to have a job. I am the oldest child in my family. I have one sister and two brothers. So, I have to help my family, I have to. I should give back my mom and dad put in me, spent for me. (Ayşe, First interview)

Besides clear long-term goals, subgoals and progress checks fuelling the energy to follow the path are also crucial components of a DMC experience, which are observed in both cases. Ayşe performs progress checks based on her improvement in oral communication. What is noticeable in her case is that she plans to master L2 focusing on all areas of the language to be able to pass the proficiency exam. However, she checks

her progress using a specific skill: speaking. Since she plans to move to the USA, being an advanced speaker of English is the most important part of her visionary goal in L2 and she mainly checks her progress on that skill. The following two excerpts illustrate it as well:

I: How do you check your progress, your improvement?

A: I just control one thing. When I, for example, talk to someone, if that person understands me well and if that person doesn't say to me "again", I think it means that it is working. But if that person says "again" two times or three times, I feel like, "oh my gosh Ayşe, what's wrong with you?" (Ayşe, First interview)

I always feel that I am improving because when I listen to some natives speaking and understand almost 80 percent of what they say, that is what makes me pleased. (Ayşe, First interview)

Yunus aims to complete each module ranking first in his class. He planned to reach his main goal via these subgoals which would enable him to check his progress and refresh his motivational intensity. The passages below also provide support for these findings:

I passed on to the intermediate level with an average of 90. Since I finished pre-intermediate with such success, I told myself that it only happens when I study. For this reason, I had a goal of completing the intermediate level with an average of over 90. I finished the Intermediate level with an average of 93. As I said, I always stick to my plans. (Yunus, Follow-up interview)

It can be argued based on the passage above that the achievement of each subgoal increased his sense of progress refreshing his energy. They also provided him with emotional satisfaction since he seemed quite pleasant with sticking to his plans all the time. The routines he set during that motivational current also function as checkpoints

for him that he can use to see his improvement. They are of emotional importance to him which is reflected below as well:

I think things pile up when I can't do my routines, and a fear arises in me that I am falling behind in reaching my goal. But when I work, I feel that I am getting closer to my goal and I get more excited, thus, I want to work harder. I feel so. Things get even more enjoyable. (Yunus, First interview)

The following passage also shows the significance of following the study practices for him in terms of progress checking ("Y" stands for Yunus and "I" stands for Interviewer):

Y: Everything is routine anyway. For example, I say that tomorrow after school I will study these and these. I always think about them before I go to bed. I tell myself that I will do them tomorrow. I create them in my mind and I go to bed. When I wake up tomorrow, all I have to do is study them.

I: So you plan how much and about what you would study each day, right? Well, did you check and evaluate whether you followed your plans or not?

Y: Yes, frankly, I checked if I followed my plans. At the end of the day, for example, I was thinking about how much of the article I understood and how much I did not understand. Or, let's say, I was planning to study the third and fourth units of the book on Tuesday. I was checking it on Tuesday evening. Did I study or was I just looking around and wasting time? I was thinking about these. (Yunus, First interview)

**Salient Facilitative Structure.** One of the core characteristics of the DMC experience is encouraging learners to set their own facilitative learning structure including learning practices followed automatically throughout the process, subgoals and progress checks, and affirmative feedback from significant others. Yunus's unique experience also reflects these components perfectly:

English has some parts as you know; like writing, speaking, listening, and reading. I spend an hour or an hour and a half for all of them, as much as I can. I always have a separate book for reading, for example. I find some listening texts on the internet for listening, I study them. For speaking, there are foreign people in our dormitory, I talk to them. For writing, I usually learn vocabulary and grammar. Usually like this, I work on a daily basis regularly. (Yunus, First interview)

It is visible in the quotation above that he sets different routines for each language skill and he spends some time for each one every day. He can be asserted to have a holistic approach to the language learning process. He concentrates his attention on all skills -not excluding any of them, which is in line with his main goal in L2 learning. Since Yunus has a vision of himself speaking English like his mother tongue, he seems to be aware of the fact that he needs to advance in all areas of the language, namely, speaking, listening, reading, writing, vocabulary, and grammar. It would not be realistic to have advanced level proficiency in L2 without an integrated approach. Yunus appears to have created his routines with that awareness and sticks to his routines every day to reach his goal.

As in Yunus's case, Ayşe also engages in new behavioral routines that she follows automatically. Since her visionary goal requires oral communicative competence in L2, she spends more time on oral communication skills via extracurricular activities, though she studies reading as well. Ayşe studies at least four hours every day.

When I'm back home, I watch some American movies, I do reading practice, and then listening practice on YouTube, so I can improve my English. I can listen to VOA. These are the things I do every day. After school, if my class finishes at 5, I will reach home at like 6. 7-8-9 and 10, so 4 hours every day. (Ayşe, First interview)

During the first round of interviews conducted around the beginning of the first semester, Ayşe talked about her need to have a native friend for speaking practices. Then, in the language learning diaries she wrote a few weeks later, she stated that she had found one. Each week they were meeting a few times to talk. It can be advocated according to the data that Ayşe had a strong desire for a new routine for herself and she succeeded in putting it into practice. The extract below is about her new routine with her native friend:

I: For week three, when I asked you about your feelings, you said “I met a friend who is a native speaker. So I practice English with him and that makes me happy.” So how often did you practice with him?

A: Not every day because he studies at a different university and I don’t want to disturb him. I think it was more like three or four times a week. Sometimes we meet at his university and we talk. (Ayşe, Follow-up interview)

Moreover, affirmative feedback taken from significant others is highly supportive of the DMC process since it produces a feeling of success and energy for the following steps of action. As can be seen in the upcoming passages, their positive feelings have been influenced by the affirmative feedback they get from their instructors about their progress and also the expectation from them in the proficiency exam. The proficiency exam that is taken at the end of the semester is a crucial step for prep-school students since they cannot start their departments without a passing grade on that test.

It would be plausible to argue that it is much more important for Yunus since success-orientedness is one of his characteristics. It appears that the feedback from his instructors made him feel much more confident about his progress and increased his willingness and motivational intensity:

This week, I experienced things that increased my motivation. For example, my teachers told me that I could get a very reasonable score on the proficiency exam,



which made me happy because I completed more than half of the way. (Yunus, First interview)

Ayşe got positive feedback from both instructors and her relatives who are advanced-level speakers of English. They were highly motivating for her and they increased her self-confidence during the intense process:

A: My teachers told me “you are good, we trust you”. They also told me that I can do it. They say “your speaking is very good. Even your accent is very good, everyone can understand you. So, don’t be afraid. Just do it, you can do it”. They are always very motivating. Also, my uncle... He lives in Britain, and he has a different accent from me because he is British. His daughter and he said to me “I trust you, your English is good, just move on, and don’t be afraid of anything”.

I: Okay, so how do these comments affect you?

A: I feel happy; I feel that I can do everything. (Ayşe, First interview)

**Positive Emotionality.** Qualitative data revealed that positive emotionality in DMC experiences is also perfectly reflected in both cases. Yunus is interested in learning about different cultures and lives to expand his horizon. Using L2 for that purpose gives him great pleasure in the learning process and strengthens his ties with his studies:

I: How do you feel about the English learning process, do you enjoy the process here or not?

Y: Of course, I enjoy it. After all, I learn a different language and I can communicate with different people. For example, I live in a dormitory. There are foreign people in the dormitory. I feel better when I communicate with foreign people. I mean, English is a language that unites us all. That's why I cling more tightly to English. (Yunus, First interview)

While exams create a source of anxiety for many learners, Yunus seems to enjoy them as well. The extract below exemplifies his positive emotions during exams:

There is nothing that I do not enjoy, I always enter the exams with a smile on my face, and I enter with joy. (Yunus, First interview)

Both as a part of her identity and as a result of her studies, Ayşe also states that she enjoys the language learning process:

A: Whenever I see a movie, I think that I know a lot because of my vocabulary. Or whenever I speak to someone who knows English, I feel like “oh you know English you can speak English, so there is nothing to be afraid of”.

I: So, your feelings change positively.

A: Yeah, in a positive way, because I don't like to be pessimistic. I always like to be optimistic. (Ayşe, First interview)

As the above passage reveals, Ayşe's positive emotions are strengthened by her progress as well. Whenever she realizes that she is coming closer to her goal, she feels satisfied and her feelings of satisfaction fuel her energy.

What is noteworthy in Ayşe's data is that her positive feelings can fluctuate slightly while studying grammar. She is aware of the fact that to be able to achieve mastery in L2, pass the proficiency test, and reach advanced level communicative competence, she needs knowledge of L2 grammar. Thus, she focuses on grammar studies as well. However, she does not deny the fact that she does not enjoy learning grammar. While communicative activities give her satisfaction, grammar studies are mechanical and dull for her:

I don't enjoy studying grammar. I feel bored but I tell myself I have to do this, otherwise, I can't pass the exam, or I won't speak English fluently. I will always

have broken English because I won't know if it is past or present or future. (Ayşe, First interview)

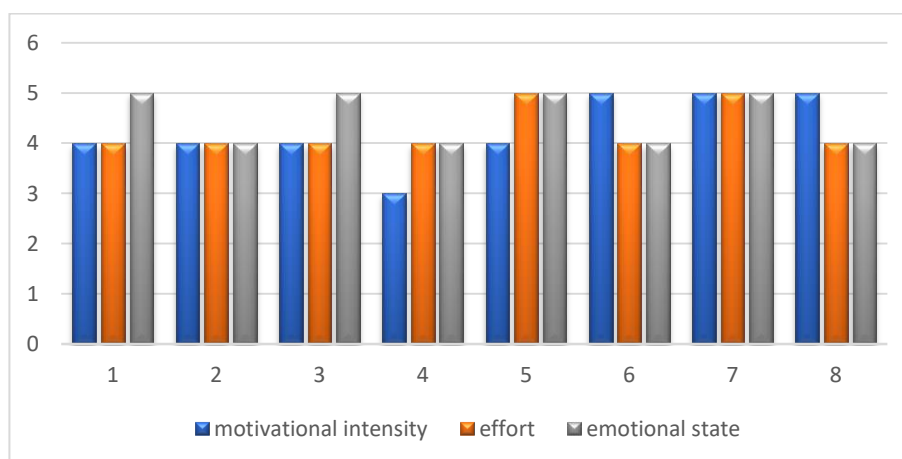
Finally, though it happens rarely, Yunus experiences very short fluctuations in his trajectory due to the slight mistakes in the exams leading to lower grades than he expected. However, he manages to maintain his intense motivation and self-confidence during these times and considers them as new learning opportunities for him to improve more:

As in the 1st week, my motivation did not change much during the 2nd week as well. I only had a few short-term fluctuations in my motivation due to the writing exam. However, not being able to do it did not cause alienation. On the contrary, it created the thought that I should do it. I thought I should do more. (Yunus, Follow-up interview)

**The Motivational Pattern of Yunus.** As explained in the previous section, Yunus represents the characteristic features of the DMC experience perfectly. The motigraph that he plotted biweekly and submitted with his language learning diaries also supported the interview data reported so far.

**Figure 20**

*The Motivational Pattern of Yunus*



It can be seen in the graph that his motivational state, affective state, and effort during the current were quite stable without any significant break downs. As clarified in the literature as well, the DMC experience leads to a continuous motivational intensity accompanied by directional effort and positive emotions focused on the achievement of the target goal. Yunus's case obviously reflects these hallmarks of DMC.

We can see in the motigraph above that Yunus scored high in all three aspects he was asked to grade himself for 8 weeks (from -5 to 5). He scored 4 and 5 for all components in the graph except for week 4. During that week he had a slight fall in his motivational intensity and he ended up choosing 3 for it. Examining the language learning diary Yunus wrote for that week, it was seen that the writing quiz was the reason for the fall in his motivation. As always, he was anticipating a very high score on that quiz, but he got a few points less than he expected which made him feel anxious. However, it did not take him long to overcome this breakdown. It can be seen in the graph that he had a rising movement following that fluctuation, which was because he started studying much more after the quiz result not to experience the same "failure" (from his perspective) again. Lastly, it is clear in the graph that his emotional state and language learning effort pursued a high and stable trajectory throughout the 8-week period, which was in line with his DMC state.

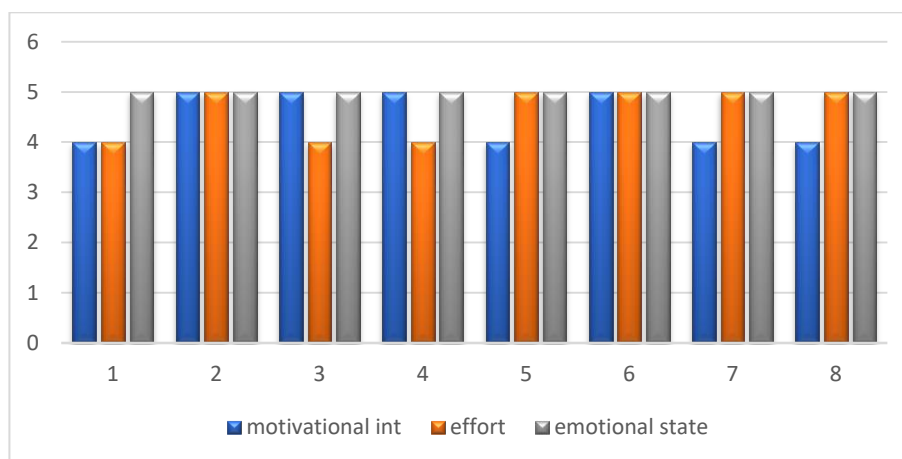
**The Motivational Pattern of Ayşe.** Ayşe has been identified as a learner in the intense motivational current and her graphic representation created based on her self-plotted data supported her experience. She has the most stable graphic among the cases in this study and her scores are at the highest grade band with no fluctuations. She appeared to have constant motivational intensity, affective state, and effort throughout the 8-week diary-keeping period, which is a perfect display of her DMC state.

Even though Ayşe had stated that she did not enjoy studying grammar much, it was not reflected in her motivational trajectory graph. Thus, it is possible to speculate that since she defines herself as an optimistic person, she did not let her negative emotions

about grammar influence her intense experience. She managed to pursue her positive feelings and satisfaction constantly which could be attributed to the empowering role of goal-orientation in DMC experiences.

**Figure 21**

*The Motivational Pattern of Ayşe*



A close investigation of her data showed that she marked 5 for her emotional state during the whole module as a perfect illustration of her positive emotionality in her DMC state. Her effort was also at the highest level for the second half of the module, which can be related to the fact that as the end-of-course exams and the proficiency exam came closer; she did not want to have even a slight decrease in her effort state.

To sum up, the results of the investigation about Yunus and Ayşe confirmed their long-term and intense motivational experiences, namely their DMC states. Both of the participants had clear and long-term goals which were in line with the salient features of their identities. They were guided and empowered via the progress checks and positive comments from significant others surrounding them while following their newly-set behavioral routines from the beginning of the current to the desired end-goals. Positive emotionality was also highlighted in both cases via the interview and motigraph data. Being two DMC-experiencing participants of this study, Yunus and Ayşe affirmed their

motivational trajectories through the self-plotted motigraphs as well, which provided support for the qualitative findings about them.

### ***The Cases in DMC-like Group***

Three cases, Hakan, Peri, and Faruk, were identified with DMC-like featured sustained motivation. The DMC-like experience was identified by the researcher based on the frequency of fluctuations in the motivational intensity as well as the breaks in the structure of DMC. These cases were found to be under the influence of a partial DMC with occasional breakdowns in their goal-vision orientedness, facilitative structure, and positive emotionality.

To introduce the students in this group briefly, Hakan was an 18-year-old prep-school student, and Peri and Faruk were 19. Hakan's department was history, Peri studied psychology and Faruk was an economy department student.

Hakan chose the history department since he had a great interest in social sciences. Learning about different cultures in the world through English was one of his desires. Though Peri and Faruk also mentioned their interest in world cultures, Hakan had a greater ambition about it due to his department as well. Among the salient characteristic features of Hakan were being a social person enjoying interaction, an amateur theatre player, and a travel lover. To describe Peri in more detail, she was observed to be an anxious learner; however, she could overcome it by studying hard within a pre-planned program. She scheduled her daily activities in her mind and stuck to them most of the time. She also enjoyed being a social person in her private life, but not while learning English since she preferred studying solo. Being an economy department student, Faruk had more academic interests than the others such as working as an intern in two different non-governmental organizations about immigrants and improving his language skills through writing and reading articles there as well as talking to the academicians and business people in these organizations.

Differing from the DMC learners, Yusuf and Ayşe, reported so far, Hakan, Peri, and Faruk did not represent the main characteristics of a DMC completely. Several core components of DMC were observed in their experiences such as clear goals and subgoals, progress checks, feedback affirming their improvement, some facilitative routines to follow, and positive feelings most of the time. However, certain breakdowns which influenced the power of their sustained motivation were recognized, especially in the positive emotionality domain. For example, Hakan's positive feelings decreased for some weeks since he felt that he fell behind his classmates. He was bored and tired during some weeks when too many new subjects and vocabulary items were covered and he was unable to catch up with them to study. The classroom environment and his relationship with his classmates were also influencing Hakan's motivational state since he enjoyed human-interaction and felt unhappy when he did not have close friends in his sections. Just like Hakan, Peri also fluctuated in her emotional state, which harmed her motivational intensity. The reason for the instability in her trajectory appeared to be exam anxiety. Lastly, Faruk had some significant problems with her private life during weeks 6 and 7 which affected his emotional state, motivational intensity, and effort negatively leading to breakdowns in the language learning process as well. As a result of the above-mentioned fluctuations especially in their emotional states, these participants were categorized as DMC-like learners with partial DMC characteristics.

In the following section, the characteristics of DMC-like cases reflected in Hakan's, Peri's and Faruk's experiences will be reported thematically. First, the features of the intense current that they already experience will be reported, and then the fluctuations in their experiences will be clarified justifying the rationale behind why they were labeled as DMC-like learners. Finally, motivational patterns of their partial DMC states will be presented separately.

**Goal/vision orientedness.** To clarify the core characteristics of three DMC-like cases in more detail, first of all, long-term self-concordant goals initiating a strong

motivational state were observed in all of them. As a history department student, Hakan's end goal was to work as an academician in the field. The job opportunities in the academic world were appealing to him and he certainly needed L2 for that purpose. In addition, he was curious about different cultures in the world, which were goals in line with his department and interest in social sciences. The extract below summarizes his goals for learning English:

For example, the history department, you know, is not a 4-year process for me. It is a process for me leading to the academic profession and I need to learn English for it. Culture and future job opportunities are both targets for me right now so I definitely need to learn English. (Hakan, First interview)

Peri's long-term L2 goals which she sought to reach were learning English perfectly to be successful in her department and career, and joining the Erasmus program which requires speaking English well. She was in the intense motivational current with the visions of these long-term goals related to the self-actualization needs in her mind. The following passage clarifies these points ("P" stands for Peri and "I" stands for Interviewer):

I: Why are you learning English? Can you explain it?

P: I have two goals right now, I want to go abroad with the Erasmus program and I want to learn English very well not to fail in my department, psychology, in the future. You know, I have to get the knowledge very well from our teachers so that I can touch people in my future life. If I can't learn English well here, I can't fully understand my professors in my department, which means I can't touch other people's lives. I may have problems communicating with them.

I: So why are these goals important for you? So why is Erasmus important and why is the other one important?

P: It's all about being happy. So if I do these things I will be happy. Enough reason for me. (Peri, First interview)



Similar to Hakan and Peri, Faruk also mentioned a long-term goal related to his career ("F" stands for Faruk, and "I" stands for Interviewer):

F: Well, English is one of the most important steps for me to the place where I want to be in the future. In fact, for example, I have a goal for my life, because I have a dream job, and English is my first step to reaching that job. If I don't learn English well, I won't be able to reach that goal completely.

I: So what is your goal?

F: Being a diplomat. (Faruk, First interview)

The analysis of interview data disclosed that three of the cases had similar sub-goals such as being successful in the end-of-course test, graduating from prep school successfully, and mastering L2 during that year to speak it or use it in academic contexts proficiently:

I did not start studying for the end-of-course test a week beforehand. I've been studying for the exam since the term started. That's why I completed this module with a reasonable grade again. (Peri, First interview)

My goals are not over yet. I have to improve my English more to pass the prep class and speak perfect English. (Peri, First interview)

I would like to both write and speak in academic language. (Faruk, First interview)

Besides these, Hakan was planning to join Work & Travel program to see different countries and cultures, which was another step toward his future goals. He explains these sub-goals as follows:

My priority right now is my preparatory year, and since I plan Work & Travel program before starting my department, I definitely need to learn English very well. (Hakan, First interview)

Prep-school education was a stage for them to improve the skills they focused on and achieve their future goals. It can be asserted that these sub-goals were instruments for them providing guidance in their intense motivational journey and functioning as control points on the way to the final destination.

Progress checks are among the hallmarks of the DMC experience providing feedback about improvement. All of the participants in the DMC-like group preferred checking their progress with a comparative perspective: they analyzed what they could do previously, namely a few weeks before, and what they can do now, at the moment of data collection. They also evaluated themselves by comparing the frequencies of their current errors to the previous ones while producing the language:

Speaking, the first one is definitely speaking. I check whether I can use something that I know while speaking, for example, pronunciation. I realized that the pronunciations of some words that I was sure about were very different actually. Writing, for example. I couldn't write that long before. But now, for example, we write about Turkey's society, the movements in society, and how it looks for someone from the outside. For example, I could never write that before. We were just writing about the weekend here when we started. Now we have started to write about what kind of a society Turkey's society is, so there is a difference in all skills. Be it writing or listening. For example, listening is normally very difficult in my opinion. It is one of the most difficult ones, especially when they speak fast. Here, for example, we have note-taking tactics. In the past, if I was stuck with a word, I was thinking about it the whole time I was listening. I learned that it was wrong. I learned that it's better to listen and then put them together in your head. So now it's all in progress. (Hakan, First interview)

Faruk checked both his productive and receptive skills to see his progress:

I check how often I make mistakes that I used to make. That's what I check. I noticed that my errors started to decrease, in my speech as well. And I'm starting to be a little more familiar with the different uses. I hear different teachers, for example, they talk at school, you know, it doesn't sound strange. Because I think the ear is starting to understand better. That's how I realize it, according to myself. Of course, these are reflected in my grades as well. (Faruk, First interview)

Finally, observing her improvement based on her previous experiences and the current ones was a strategy for progress check observed in Peri's data as well:

I always make silly mistakes in my writing. But, in my last writing, which was 10 points, I said that this is my best writing I guess. I thought that there is no mistake in this one. I said, "No, I didn't make any mistakes, even if I did, it may be very little, I will get a good grade from this". And I got 9.5 out of 10 in that writing. So, I think this is progress. (Peri, First interview)

Different from her peers, Peri tended to evaluate her progress in comparison to her classmates' success as well. She had peers who had not taken the proficiency test at the beginning of the term although they could pass it. Thus, they were in the same class with Peri but had higher levels of proficiency than her. She cared about the gap between her level and her peers a lot and used it as a criterion for herself to check her progress and also to increase her ambition to continue her practices:

P: For example, some people in our class are good at English. They did not take the proficiency exam. When I compare my sentences and vocabulary repertoire with theirs, mine is less. For example, while they can express themselves better, I am worse than them, be it in terms of grammar or vocabulary. Sometimes that situation makes me sad and sometimes it makes me ambitious. But, I experience ambition much more often.

I: Do you evaluate yourself in comparison to others?

P: Yes, a bit like that. (Peri, First interview).

Although all three cases in DMC-group talked positively about their signs of progress, Hakan did not hesitate to confess that he could not make the progress he was expecting in some skills such as vocabulary:

Well, everyone was saying that the intermediate level is completely based on vocabulary, vocabulary is very important. When I finished the level, I was expecting to have progressed much more, but I don't think I've progressed that far, even though I passed the exam. What was my dream when I finished the level? I was seriously thinking that now I have to speak fluently, with a lot of vocabulary, but it didn't happen like that. (Hakan, First interview)

From what he heard around, his expectation was, as clearly seen, quite high about vocabulary development. However, he ended up with a lower level of proficiency in vocabulary than he was supposed to have, which seems to have discouraged him a bit.

**Salient Facilitative Structure.** The operation of a directed motivational current requires new behaviors set for the unique experience, which was observed in the data provided by all DMC-like cases. As Hakan was a social person believing in the significance of interaction to learn the language, he spent a great time on oral communication practices. He attended self-access-center activities organized at his school after class hours and tried to have extra speaking practices. He had daily listening and reading exercises to follow. Finally, he started keeping a diary to write about his personal experiences every day, which was a completely new practice for him. He explained his recently embraced schedule as follows:

I: How do you study? Do you have any study routines?

H: ... For example, I don't read English books every day because there is a Turkish book that I enjoy more. For example, I read an English book every two days, I do listening every day. You have to do speaking every day anyway

because you're at school. I also attend self-access-center activities. Other than these, I dedicate one hour a day to reading after school. It is a routine for me. I always listen to 2 or 3 listening texts, and it takes half an hour because they are short. I have half an hour of listening every day outside of school. I said that I would read the book once every two days, and as I said, we speak for 5 or 6 hours a day. I also keep a diary in English every day before I go to bed. They are the things I do as a routine. For example, I always keep track of what happened that day, even if it's a simple thing, I write it down so that I don't forget it. If we learned grammar, I try to use that grammar in that diary. So, I try to use all the skills in one day. (Hakan, First interview)

Faruk explained the study practices that he follows under two titles: concrete and abstract studies. While concrete studies were about studying in line with the curriculum in a pen-and-paper environment, abstract studying was about being in contact with English in various contexts via listening, watching, and reading, namely extra-curricular activities:

In my concrete studies, for example, I find different versions of the vocabulary I learned, whether they are adverbs or nouns, etc. I find these versions. I'm trying to use them in sentences, I keep a word book like this, and I'm studying vocabulary like this. I try to form sentences. And I study the tenses the same way, by writing. What I call abstract studying is listening to music, and watching TV shows, especially stand-up shows. Stand-up shows are very useful because the local language is used a lot. You have to understand the joke. And I watch stuff like that all the time. Abstract studying helps that way. I do abstract studying every day because I'm always in touch with them. Concrete studying, for example, takes place every 2 days, at the latest every 3 days. (Faruk, First interview)

He also explained his emotions in cases of deviations from these routines with a religious metaphor to emphasize their significance for him:

How can I say... when I don't follow these routine practices, I get the feeling that there is a creed and I am sinning when I don't follow that creed. (Faruk, First interview)

Peri had a strong desire to do her job perfectly to feel comfortable and happy, which was, in fact, a part of her self-actualization. Accordingly, she was engaged in routine practices that she followed without breakdowns and they helped her to decrease her stress level, especially in exam situations. With these purposes in mind, she set routine behaviors to follow in the current which were doing revisions, following YouTube channels in L2, and vocabulary learning:

I: So what do you do to achieve your goals, how do you study?

P: I revise every day. For example, we came to school; today we covered 2 pages in the book. As I said before, there are several channels that I follow on YouTube for listening, writing, reading texts, etc. First, I watch their videos. Then, I revise these pages and study new vocabulary. (Peri, First interview).

Not to deviate from the facilitative pathway in her experience, Peri kept a balanced plan about her study routines and other human needs such as taking care of herself and socializing with her friends:

I: I'm a bit of a planner, you know, when I say I'm going to do that, I do it right away. Then, I spend time with my friends again.

I: You organize things all in one way or another.

P: I'm just a little... let's call it an obsession. I don't want my plans to be disrupted. (Peri, First interview)

As the excerpt above suggests, she did not devote her whole life to studying English but also took some time to chat with friends and relax, which could be a sign to categorize her in the partial DMC learner group rather than a pure DMC one.

The empowering effect of affirmative feedback was observed in the distinctive experiences of all cases. Two of the participants in the DMC-like group, Hakan and Faruk, stated although the positive feedback they got from family and friends made them happy, the ones they got especially from significant others who were proficient in L2 pleased them much more since being approved and appreciated by them increased their confidence fuelling their energy:

Actually, for example, when my friends ask me to speak slowly, I say that I have learned something, and that's why I get this reaction from them. That makes me happy. But, I am very happy that those who know more and those who are more advanced than me congratulate me. Learning is very important to me. Thus, I'm happy and a little proud. (Hakan, First interview)

People in academic life around me are very helpful, they make positive comments and support me. For example, most of the students at the institution where I do my internship... They give their support. They are as supportive as they can know. There is some support from my girlfriend. She speaks three or four languages because she is Azerbaijani. (Faruk, First interview)

Differing from the other two cases, Peri's parents influenced her intense experience most positively. When she used English to communicate with an international friend online, they realized that she could speak well and commented positively on that, which encouraged Peri on the way to her L2 visionary goal:

I: Do the people around you see your progress and comment on that?

P: Yes, my family does.

I: So what do they say?

P: For example, there is an application; you can make foreign friends there. They don't see you in any way, you just communicate with them by speaking. When I went to Mersin and when I sent a voicemail, my mother said that I am really good

and so on. Then, my father said “can you tell us what you said?”, etc. I like these kinds of things. (Peri, First interview)

**Positive Emotionality.** The final core component of DMC, positive emotionality, which was also defined as its magical feature by Dörnyei et. al (2015), was reflected in three DMC-like cases. They mentioned loving and enjoying the process several times in the interviews and diaries. The passages below describe their common positive feelings:

I think learning English is a very enjoyable thing because it comes with culture. (Hakan, First interview)

This year I think I put a lot of effort into learning English because I do a lot of things. There is only one course, English. Of course, there are many different skills in it, but I think I put a lot of effort into it. But I don't feel tired because I love doing it. (Hakan, First interview)

I: How do you feel about learning English?

P: Actually, I love it; I enjoy it especially when I achieve something. (Peri, First interview)

I enjoy learning languages and learning new things makes me happy. My desire to learn it makes me happy. (Faruk, First interview)

**Fluctuations in DMC-like Cases.** Although data reported so far about Hakan, Peri, and Faruk displayed that they carried several features of a fully-fledged DMC experience, the reason why they were categorized as a partial-DMC learner was mainly that they had strong break downs in the structure of positive emotionality in their specific cases, and they were impacting upon the power and sustainment of their motivational state. For example, Hakan had significant fluctuations in his feelings since he felt that he fell behind his classmates:



This week I feel reluctant as I fell behind for a few days. (Hakan, Language learning diary, week 2)

As stated before, Hakan was an amateur theatre player and at the time of data collection via bi-weekly diaries, he was rehearsing for a play they would put on the stage very soon. Due to his very busy schedule, he missed a few classes which resulted in some fluctuations in his positive emotions. He also appeared to feel bored and tired during some weeks when too many new subjects and vocabulary items were covered and he had difficulty catching up with them:

I: When we first talked, you talked a lot about this enjoyment. Did it continue this semester, throughout the module?

H: Well, yes it did. But, in some periods, I got bored because too many new grammar and vocabulary items came together. (Hakan, Follow-up interview)

Finally, the classroom environment affected Hakan's motivational state negatively in week three since he felt unhappy when he did not have close friends in his section. Hakan is a social learner positively influenced and activated by the group dynamic. He likes being a part of a social circle and enjoys learning in interaction with them. In this specific case during week three, he felt bored during classes since he did not have close friends to enjoy learning:

That week I lost my motivation because I was bored, and I was a little sad. It was about human factors, not something related to the course or the teacher, but rather to people because I couldn't have found anyone close to me in class. Not so in upper now. I have a few friends in my upper class now and the lessons are much easier for me. (Hakan, Follow-up interview)

Similar to Hakan's case, Peri was classified as a partial DMC learner due to her occasional fluctuations in the positive emotionality domain. Data revealed that her anxious side would surpass her positive feelings in cases of exams and negative thoughts about

her improvement and success would replace them. Her motivation would also be adversely affected by them:

I: You mentioned that you love learning English. So, do you experience any fluctuations in your feelings about this process?

P: Yes, especially in the case of the exams... For example, it happened yesterday. There was a writing thing today, I was nervous last night.

I: Was there something like a task today?

P: No, it doesn't matter at all. Since I'm going to get scores from it, though it affects the final grade very little, I still get nervous. Sometimes I even think that I won't be able to finish prep class and pass to my department. (Peri, First interview)

P: My motivation decreased because it was quiz week. (Peri, Language learning diary, week 2).

Finally, Faruk had some significant problems with his private life during weeks 6 and 7 which affected his emotional state, motivational intensity, and effort negatively leading to breakdowns in the language learning process as well:

This was the most difficult period for me because the most ridiculous things happened to me due to personal reasons. That was a hard period. The real world and the world in my head were colliding. The first few weeks were very good. My studies were going well, I was able to understand the subjects and I studied well. In the sixth and seventh weeks, a fluctuation started with the events and my motivation was low. My motivation was falling in the classes. For example, I could not listen to the lectures during these two weeks because I could not focus. By examining the book after the lesson, I could understand what the teacher was talking about. The teacher speaks Turkish, I don't understand, he speaks English I don't understand because I wasn't listening at that moment. At that moment I could

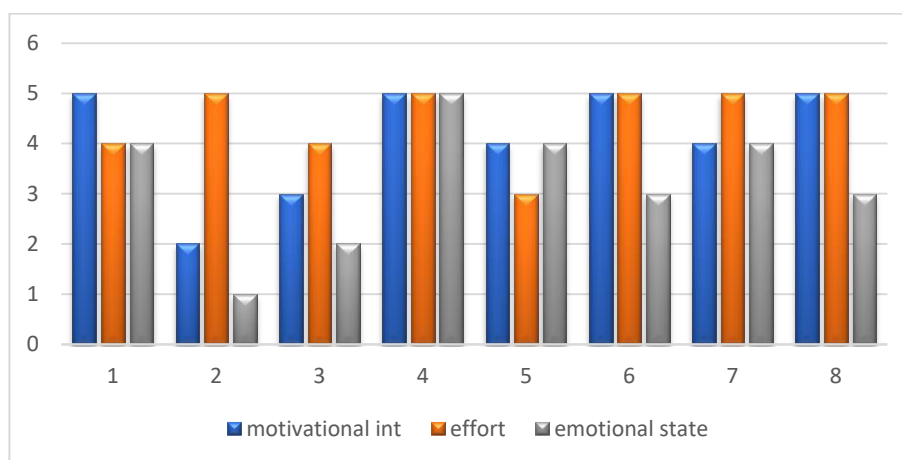
only hear voices and couldn't focus. The last week, the eighth week, and the first five weeks were so good for me. (Faruk, Follow-up interview)

To sum up, the above-mentioned fluctuations especially in the emotional states of Hakan, Peri, and Faruk ensured them to be categorized as DMC-like learners with partial DMC characteristics.

***The Motivational Pattern of Hakan.*** The motigraph representing Hakan's motivational and emotional states besides his effort supports the data reported about his DMC-like experience. Although Hakan was discovered to have numerous core features of a DMC state, he deviated from Yunus and Ayşe with some explicit fluctuations in his self-plotted graphic.

**Figure 22**

*The Motivational Pattern of Hakan*



As explained in detail above, Hakan had been through significant breakdowns during weeks 2 and 3 due to missing some lessons, falling behind in class, and feeling alone in his section. These fluctuations were represented in his self-plotted motigraph too. Both his motivational and emotional states were observed to be quite low during these weeks:

This week I feel reluctant as I fell behind for a few days. (Hakan, Language learning diary, week 2)

That week I lost my motivation because I was bored, and I was a little sad. It was about human factors, not something related to the course or the teacher, but rather to people because I couldn't have found anyone close to me in class. Not so in upper now. I have a few friends in my upper class now and the lessons are much easier for me. (Hakan, Follow-up interview)

However, a striking change has been discovered in his graphic during week 4; he marked the top score for his emotional state, motivational state, and effort during this week. The excerpt below proposes that Hakan's motivational intensity was freshened that week by his interaction with international people. Seeing that he could easily communicate in L2 increased his self-confidence and motivation. The drastic change in his motivational state appears to have revived his positive emotions.

I: How would you rate your motivational intensity this week?

H: It increased drastically because I had conversations with a few foreign people and I realized that I could talk. (Hakan, Language learning diary, week 4)

During the second half of the module, Hakan did not appear to have significant changes in his graphic, which was observed in many other cases in this study, possibly due to the end-of-course tests coming up. It would not be speculative to assert that having several core components of the DMC experience, the willingness of DMC-like participants to reach their highly valued end goals would empower them to continue the process more persistently as they come closer to the end. Thus, Hakan's positive emotions and strong motivation continued until the end of the module.

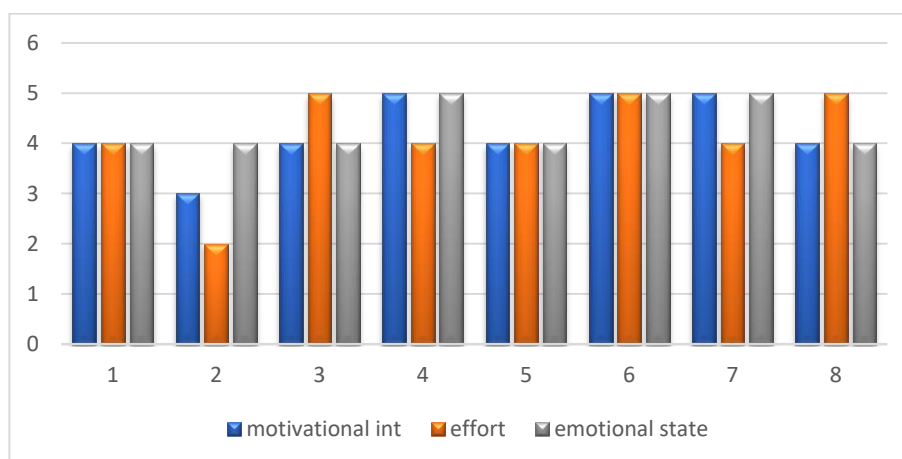
One interesting finding in Hakan's graphic was that although he had remarkable break downs in the intensity of his motivation and positive feelings, he pursued putting effort into L2 learning throughout the module. During the weeks when he felt bored and

reluctant in classes, his effort did not fluctuate as significantly as the other components in the graphic. Thus, it can be asserted that while the strength of Hakan's motivation and emotions decreased, he still tried to keep his study routines and not deviate from his directional path to the end goal. Even though he was a DMC-like learner with partial salient characteristics of it, the strength of the current supported his learning process during difficulties.

***The Motivational Pattern of Peri.*** The graphic representation of Peri's experience provided data in line with the findings reported thus far. Similar to Hakan, she tended to have fluctuations in positive emotionality though her reasons were different. Exam situations were the biggest challenges in her language learning process impacting upon her feelings and thus motivational intensity and effort as well which were reflected in her self-plotted motigraph below.

**Figure 23**

*The Motivational Pattern of Peri*



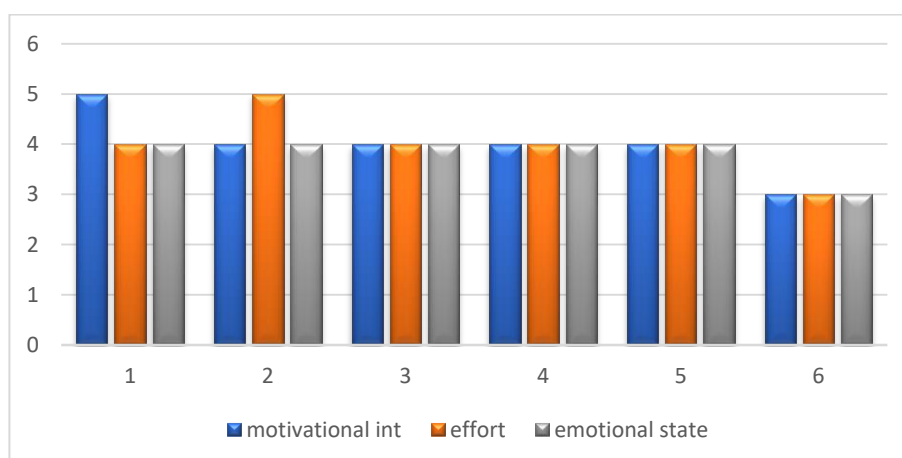
As it can be clearly observed in Figure 23, in week 2 Peri chose lower scores than the other weeks in all three variables and she attributed that decrease to the stress caused by the quiz. Being graded was a source of anxiety for her. However, similar to Hakan, Peri also did not appear to have significant changes in her graphic during the second half of the module, which would possibly be due to the end-of-course tests coming

up. Her positive emotions, strong motivation, and effort continued until the end of the module. That was an interesting finding for Peri's case. Being an anxious learner about exam situations, she would be expected to feel much greater breakdowns due to the upcoming end-of-course test. However, she continued the second module just like the other DMC and partial DMC participants in the study. It can be speculated that the strength of her vision of her end goals and her desire to reach them empowered her to continue robustly as the end of the term approached.

***The Motivational Pattern of Faruk.*** The motigraph showing the motivational and emotional states and effort trajectory of Faruk was in parallel with the interview and diary data reported thus far. Faruk had started the period with high motivational intensity, positive emotions, and great effort. He pursued his trajectory for the first five weeks and the process was quite perfect for him. However, the affective breakdown he had during week five due to some private family and relationship issues completely reversed his well-bound experience. He even did not submit his diary and motigraph during these weeks but provided data about them during the follow-up interview. Figure 24 below presents his motivational pattern.

**Figure 24**

*The Motivational Pattern of Faruk*



It can be clearly stated that the fluctuations in Faruk's case were not due to the challenges of the intense language learning process but related to his privacy. Thus, his whole life was adversely affected during that period and educational issues also got their share. Similar to Hakan and Peri, the current did not wane in Faruk's particular experience as well. While the strength of his motivation and emotions decreased, he continued to put effort into the process not to deviate from his directional path to the end goal. Though he was a DMC-like learner reflecting partial core characteristics of it, the strength of the current supported his learning process during difficulties.

In those weeks (weeks 6 & 7) I was doing the assigned homework, and handing in the writing, but I was just doing them for the sake of doing them. I was trying to get them out of the way because I didn't want to deal with anything. I also took a break from sports. So it was at that time, but it wasn't just about English. (Faruk, Follow-up interview)

To sum up, analysis of data about Hakan, Peri, and Faruk confirmed that they carried several core characteristics of the DMC experience such as clear and long-term goals, being guided and empowered by progress checks and affirmative feedback, and following behavioral routines to reach their end goals. On the other side, enjoyment and satisfaction in the current appeared to be the weakest link in their experience leading to fluctuations to a great extent. All cases in this group had initial breakdowns in the positive emotionality domain triggering the others afterward. Hakan attributed the instabilities in his emotions to feeling overloaded and tired in the process in addition to some social context issues; Peri emphasized exam anxiety and stress as the salient reasons for her breakdowns, and lastly, Faruk mentioned some private issues affecting his whole life let alone leading to fluctuations in the current. The motigraphs summarizing their motivational trajectories provided support for the qualitative findings about them.

### ***The Cases Starting in DMC-like and Ending up in the No-DMC Group***

The current study was pursued to investigate the salient characteristics of DMC, DMC-like, and No-DMC language learners as well as various ID factors in relation to them. However, during the qualitative data analysis stage, another learner group that includes the cases starting in the DMC-like group and ending up in the No-DMC group emerged with distinct characteristics from the others. Thus, the study ended up with 4 different DMC groups to be investigated further.

Two cases were identified in this newly-emerging group: Oya and Melis. To expand upon them further, they had distinctive key characteristics of DMC-like learners at the beginning of the 8 weeks; however, they completed the period with strong deviations from these characteristics and finally fell into the No-DMC group. They both came across significant obstacles which hindered them from pursuing their DMC-like states. Oya had to face the reality that the proficiency exam that she had to take to start her department would be much harder than she expected. She was extremely frustrated after seeing a sample of it. On the other hand, Melis had two challenges during that period that she had to deal with: health issues in her family and not feeling comfortable in her new class for that module.

To introduce the cases in the group briefly, Oya was an international student from Afghanistan and she was 20 years old. Her department was international relations and she was highly enthusiastic about learning English. Melis was 18 years old and her department was law where 30 percent of the courses were offered in English. Though her department did not require 100 percent English medium instruction, Melis was greatly motivated to learn it since she wanted to step forth among her future colleagues' thanks to her L2 skills.

In the following section, first, the DMC-like characteristics of Oya and Melis will be reported and then their transition to the No-DMC group, which refers to having no



connection with the intense motivational current, will be explained. The breakdowns in their DMC-like experiences will be expanded upon to provide a clear picture of their journey. Lastly, the motivational patterns of these cases will be presented separately.

**Goal/vision-orientedness.** Being the most prominent characteristic of a DMC experience, goal/vision-orientedness was reflected, to some extent, in both cases, which is one of the reasons to classify them in that group. Though they had valuable goals to reach, they were not as clear as it was supposed to be to start a fully-fledged DMC experience. They both stated them vaguely (“I” stands for Interviewer and “O” stands for Oya):

I: What is your goal for learning English? Do you have anything specific?

O: Yeah, for sure, I want to be the one who changes the lives of others. I mean in good positive ways. I can express the feeling or thoughts of those people, especially those women who cannot do it or who aren’t allowed to express their ideas. I mean there are many more problems when I talk about my country and women. They are not allowed to express their ideas. So, I want to be the voice of that people. (Oya, First interview)

Oya reported a strong desire to help people and especially women in her country who cannot speak for themselves. She explained that she needed English to be their voice in the world. Being an Afghan woman herself as well, it can clearly be stated that her goal was strongly related to her identity and it had significance for her. However, she could not visualize how to achieve her goal clearly. Thus, it can be asserted that her goal could not fuel her energy perfectly in cases of fluctuations. Similar to Oya, Melis had difficulty creating a clear vision of her aims. She stated that she wanted to be good at her job in the future and that she needed English to be more qualified than her future colleagues. She just knew that mastering an L2 would be advantageous in some way:

For example, when I graduate from law school, but I only speak Turkish, they will ask me “How are you different from other people?”. Every graduate knows almost the same information. When they ask that question, I can say that I know these languages, I communicated on this subject, etc. Or, for example, I think reading articles in English is a very important point in work life. I think it will give me a great advantage in my work life. (Melis, First interview)

Graduating from prep school and moving on in her department was the only subgoal for Melis:

I have to pass the prep class. This is my motivation right now. But, I don't see it only as an obligation. I'm just focused on passing. I tell myself that this is a step toward the career I want to have in the future, you need to learn it. It is both a necessity and I think it would be better to do this, I am motivated in this way. (Melis, First interview)

Similarly, Oya mentioned that to be able to achieve her desire, she first needed to graduate from her department:

I plan that, first of all, I have to complete this department, international relations. So, in this process, I cannot achieve much. So, it is a step-by-step process. I just want to achieve my final goal. And one day I will do it. (Oya, First interview)

Despite they had subgoals to achieve their desires; they were not specific but just standard procedures to be completed by each student in the school. Thus, the presence of explicit and reasoned subgoals fuelling their energy or enlightening the way of their language learning process cannot be observed.

Progress checks were conducted by Oya and Melis to evaluate themselves. Oya mainly relied on the feedback she got from instructors, especially regarding writing skills. She also compared her past and present skills to see her improvement:

I see my progress through the feedback of my teachers about the writing section or things they say like “You’re getting good” etc. And, when I analyze how much I improve, I can also understand it because I can see it. When I think about my past and now, I am definitely improving. (Oya, First interview)

On the other hand, Melis relied on her proficiency level to evaluate her capabilities and progress. She considered what she could do in line with the requirements of her level to position herself in the learning process. The following two extracts summarize her perspective:

I check my progress based on my level. Because, for example, when someone asks me a question, I can answer easy questions, but when they ask a complex question, I need to think about it. You know, if my English level was a little bit higher and if I was at the upper level, maybe I could explain myself faster and better. (Melis, First interview)

If I was in the department, I would be able to write articles in English. I am currently writing paragraphs. I've never written an essay yet. I have to go a long way because I have just reached the B1 level by struggling. (Melis, First interview)

**Salient Facilitative Structure.** Setting behavioral routines for a well-bound motivational experience and following them to a great extent was observed in that group as well. Oya reported that she had some supplementary books that she studied every day and she enjoyed that routine:

I am studying books, I mean extra books. These books are my routine, it is my every day. But the time is not clear, it depends on me. If I have classes in the early morning, I have to study at night. If I have afternoon classes, so I have to study in the morning but I have to study. I enjoy studying them. (Oya, First interview)

Unlike Oya, Melis did not talk about just one regular practice but she had many that she followed each day. She would spend most of her time studying English every day:

I spend my whole day in English. Because we have English for 5 hours at school, teachers constantly expose us to English. Then when I get back home, I try to study for at least 2-3 hours. I study my coursebooks, listen to songs, read English fairytales, etc. So that makes eight hours. I memorize words on the bus, even if it's an hour and a half, it's like 9 and a half hours. Then I try to speak English with my father at home, but since my father does not understand, I can form sentences very easily. It's like 10 or 11 hours every day that I spend learning English. (Melis, First interview)

Melis was a highly organized learner and she would make study plans for the upcoming days or even weeks. Especially, if she had an important exam coming soon, she would schedule her time accordingly:

I am a person who likes studying within a plan. I determine the things I will do each day. For example, weekly or monthly, you have to study this, you have this exam in front of you, for this, you need to do the following, etc. For example, before I start the day, I make that day's schedule. For example, study grammar today, study reading here today. I keep them in my notebook like this. I don't know, I like it that way. I plan it, I feel like I can catch up with everything that way. (Melis, First interview)

The motivational experience of Oya and Melis were clearly observable by significant others around them and they got several positive comments reinforcing their improvement and also abilities to learn L2. While Oya's commitment and progress were affirmed by her family and especially her sisters, Melis got feedback from her instructors and friends:

My family, especially my great sisters or my younger sister always say that you are good at English. They motivate me, and they say that you can learn English. (Oya, First interview)

I had difficulties in pronouncing words. My friend says that you can speak more comfortably now and you can read texts aloud more easily. (Melis, First interview)

The comments Melis got from her instructors were both confirming her strengths and informing her about her weaknesses to guide her to improve:

My teachers always say that my vocabulary and grammar are good, but I need to work on how to organize my writing a little more. You know, they say you can achieve this by writing a lot, by practicing a lot. I believe this takes some time. (Melis, First interview)

**Positive Emotionality.** The final and also magical core element of the DMC experience was reflected in Oya's experience at the beginning of the module. She started the period with highly positive feelings, especially about speaking. She enjoyed the language learning process a lot and emphasized it several times. Similar to Ayşe in the DMC group, Oya reported that she was an optimistic person. In addition, as an international student, she was aware of the advantages of speaking English as a lingua franca, which possibly contributed to her positive feelings as well:

I love the language, and I love speaking, you know public speaking. I really love and enjoy that. So, if I really want to express my ideas, and express myself to others, I have to learn this language. Because many people nowadays just want to learn it. So, because of that they understand me very easily so that's why I enjoy it, it's a kind of inspiration, a motivation for me to use it to express my ideas. (Oya, First interview)

I am a girl who always tries to see the positive side of a thing, even if it is very difficult, even if it is very bad. So, my emotional state is always positive. You know

it's an international language so in every place I know that this language will help me to solve my problems easily. So that's why I love it. (Oya, First interview)

Unlike Oya, Melis did not talk about great positive feelings. When asked about her emotions she preferred talking about the emotional difficulties she faced during the period, which also provided valuable data about her trajectory:

At the beginning of the term, I was very unhappy. I was not speaking, I was having a very difficult time, especially in speaking because the teachers speak well, and a few people in the class speak well since they have studied prep class beforehand. I was afraid that I would use the wrong sentence. I'm very comfortable right now. I sometimes have problems pronouncing a word, but I do not hesitate at all. I tell myself that it's a shame not to learn this, you need to learn this. Even if you can't say it, I can say that you dared to do it. But, for the first two weeks, it was very difficult for me. (Melis, Follow-up interview)

Similar to Hakan in the DMC-like group, Melis also had some problems with her classmates which influenced her feelings negatively throughout the 8-week learning period. It is well explained by her below:

During this module, I had different classmates since our classes have been shifted and this affected me. When I got away from my friends, I felt like I was alone. I couldn't feel oriented in my new class. I couldn't get accustomed to that class later on, too. (Melis, Follow-up interview)

**Fluctuations in their Experience.** Data presented so far about Oya's and Melis's trajectories revealed that they carried some of the key characteristics of a DMC experience while lacking clarity and strength in some others. That is why they were initially categorized into the DMC-like group. However, a longitudinal analysis of their interviews, language learning diaries, and motigraphs displayed that they could not pursue their DMC-like state throughout the whole period but moved into the No-DMC group at some

point for different reasons. As in the DMC-like group, Oya and Melis also experienced the greatest breakdowns in their positive emotions, which later on influenced their motivational intensity and the other components of their experience negatively.

Similar to Hakan in the DMC-like group, Oya did not enjoy studying grammar and felt quite unwilling to focus on it:

You know it's all about the feelings, right? When I am speaking, I enjoy it because I love it. And about grammar... I hate that part. When I am doing that, I feel tired.  
(Oya, First interview)

Moreover, Oya sadly realized that the proficiency exam that she had to take to start her department would be much harder than she expected. She was extremely frustrated after seeing a sample of it and just thought that she would not be able to manage it. That was the most significant breaking point in her experience dragging her to the No-DMC group:

My motivational intensity is getting low day by day. As much as we approach proficiency, I lose all my motivation. (Oya, Language learning diary, week 5)

On the other hand, Melis had two challenges during that period that she had to deal with: health issues in her family and not feeling comfortable in her new class for that module.

My mother had to have surgery for a minor problem. She couldn't get up for three or four days after that. That's why I had to take care of my house and my mother. At that time, I was studying mostly at night for a couple of hours. However, I realized that although I spent time studying, I could not do it effectively. I lost motivation when there were situations like this at home, but then I could overcome it to some extent. (Melis, Follow-up interview)

Melis reported that despite the significant fluctuations in her motivational state during the health problems of her mother, she could partly return to her previous state

after some time. However, she had greater challenges with her feelings for her classmates and class environment, which did not change throughout the period. The significance of the classroom environment for DMC-like cases in the intense motivational period was signified once more in that study through the extract below:

During this module, I had different classmates since our classes have been shifted and this affected me negatively. When I got away from my friends, I felt like I was alone. I couldn't feel oriented in my new class. I couldn't get accustomed to that class later on, too. (Melis, Follow-up interview)

To sum up, the most observable difference between the fluctuations of DMC-like learners and the cases starting in DMC-like but ending in the No-DMC group was that Oya's and Melis's breakdowns lasted quite longer than the ones experienced by DMC-like learners and also lead to greater negative results.

***The Motivational Pattern of Oya.*** The motigraph showing motivational and emotional states and effort trajectory of Oya was in parallel with the interview and diary data reported thus far. As explained at the beginning of this section, Oya had started the period with highly positive emotions, great motivation, and perseverance, which are all observable in the motigraph below. She had marked the top two scores (4 and 5) for them. However, week 5, when she saw a sample proficiency test and learned more about the format and content of this test, was the breaking point for her experience. Though she had the characteristics of partly DMC state so far, she could not pursue her goal-orientedness, positive emotions, study routines, and progress checks further with the feelings of anxiety and panic:

I did not know about the proficiency exam and I searched for which kinds of questions will be in it. Everyone had their idea. While it was easy for some people, it was extremely difficult for others. So it gave me the feeling of "What should I



do”? So I got a bit nervous. But this state of nervousness got higher day by day.  
(Oya, Follow-up interview)

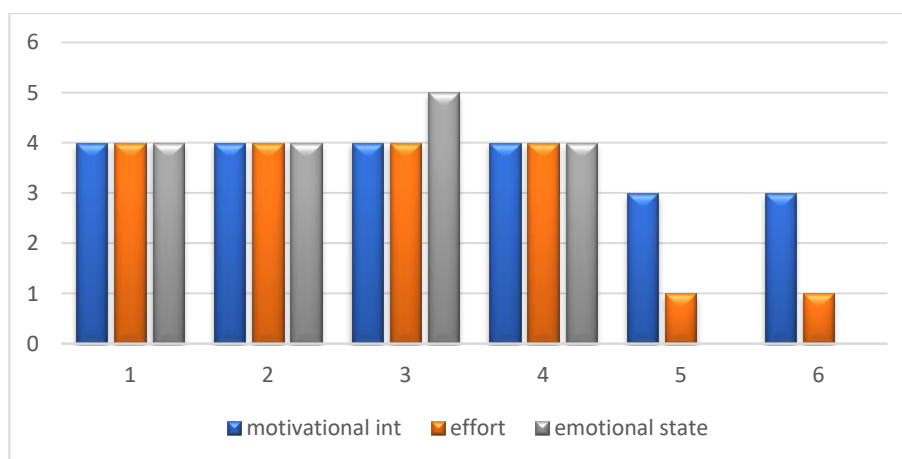
The graphic representation of Oya’s trajectory depicts that her emotional state was the most adversely influenced one. Though she had tried to keep her effort and motivation high, they were still not enough for her to function with DMC-like characteristics anymore. She had confirmed that assertion in her language learning diaries as well:

My motivational intensity is getting low day by day. As much as we approach proficiency, I lose all my motivation. (Oya, Language learning diary, week 5)

My motivational intensity was not that much high. When I thought about the proficiency exam, it decreased my motivation. (Oya, Language learning diary, week 7)

**Figure 25**

*The Motivational Pattern of Oya*

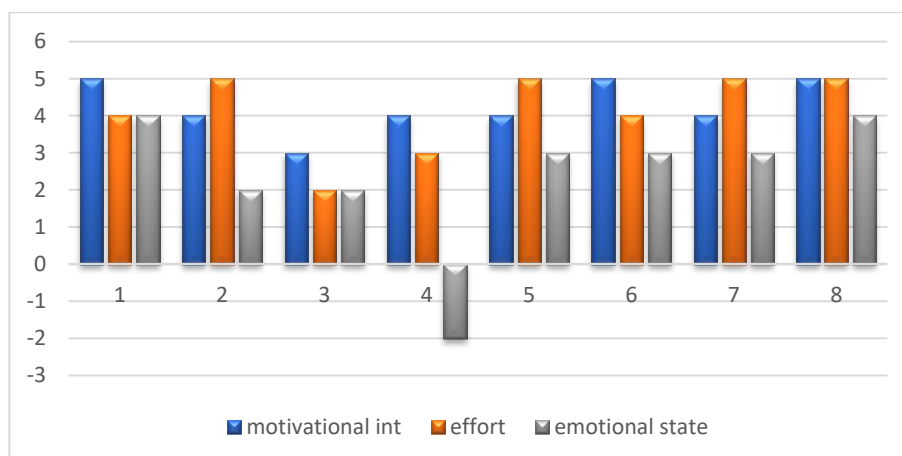


After that breakdown, unfortunately, Oya did not submit her motigraph for weeks 7 and 8 and data is missing for these weeks on the graph above. Though a follow-up interview was conducted with her later on, she was not asked to complete the graph since retrospective data would not be reliable.

***The Motivational Pattern of Melis.*** The graphic representation of Melis's data revealed that she had a dynamic trajectory. She had started the period quite positively in terms of her feelings, motivational intensity, and effort. However, in week 2, her positive emotions started to get closer to neutral ones though she increased her effort possibly to handle this change. Then, in weeks 3 and 4 she had some family issues which decelerated her. Although she tried hard to continue her effort, her studies did not yield effective results which caused negative feelings.

**Figure 26**

*The Motivational Pattern of Melis*



Melis had a great collapse in week 4 in terms of her affective state. What is noteworthy at this point is that while she scored -2 for her emotional state, she still chose 3 and 4 for her effort and motivational state. When asked about these weeks, she explained that despite the emotional challenges in her life during that period, she tried to study English to follow her routines. However, she was tired due to taking care of her home and mother the whole day and it was difficult for her to study effectively:

My mother had to have surgery for a minor problem. She couldn't get up for three or four days after that. That's why I had to take care of my house and my mother. At that time, I was studying mostly at night for a couple of hours. However, I realized that although I spent time studying, I could not do it effectively. I lost

motivation when there were situations like this at home, but then I could overcome it to some extent. (Melis, Follow-up interview)

In week 5, Melis started to return to her previous potential. She had improved her emotional state and her effort also increased in line with it, possibly since the end-of-course test was coming soon and she had to fill the gap in her studies.

Despite the great increases in her graphic, she stated in her interview that however hard she had tried, she could not feel comfortable in her new class during that module. Comparing her experience during that module with the previous ones she reported that it was the worst one for her:

I: What if I asked for a general evaluation now? So how do you evaluate your general situation in the eight weeks in this last module, when you wrote these diaries?

Me: My motivation was very low. It was extremely low. I think my circle of friends affected me a lot. (Melis, Follow-up interview)

At this school, the prep year is divided into 4 modules rather than two semesters. Thus, after every 8 weeks they take a test and switch classes and levels. As stated by Hakan in the DMC-like group as well, Melis also felt uncomfortable with this system. Since they were both influenced by their friends and classroom environment substantially, changing them often resulted in negative feelings for them which influenced their adaptation to their new classes and finally motivational trajectory:

During this module, I had different classmates since our classes have been shifted and this affected me negatively. When I got away from my friends, I felt like I was alone. I couldn't feel oriented in my new class. I couldn't get accustomed to that class later on, too. (Melis, Follow-up interview)

What should be cautioned here is that Melis's self-plotted motigraph gives the impression that she could return to her DMC-like state after two weeks of ups and downs.

However, investigation of her follow-up interview data and language learning diaries showed that she could not function with DMC-like characteristics anymore after the obstacles she had to deal with. Self-plotted motigraphs may not offer completely reliable results, but only the participant's perceptions or insights at the moment of marking are reflected. Thus, the compliance between the motigraph and the remaining data should be focused on to be able to report more sound findings. It was the reason why qualitative data collected through various tools in this study were reported in relation to each other to see their supporting and contradicting points in this qualitative findings chapter.

To sum up, Oya and Melis were highly enthusiastic learners with strong motivational intensity, positive emotions, and commitment at the beginning of the period. They were initially grouped as DMC-like cases by the researcher. However, investigating their journey throughout the module, several strong breakdowns have been observed. Since they could not overcome them quickly and successfully, all core components of their DMC-like states were influenced adversely. Oya and Melis ended the period with No-DMC characteristics.

### ***The Cases in the No-DMC Group***

While it was a challenge within the scope of this research study to find learners with a fully-fledged DMC experience, it was quite the opposite for the No-DMC group. A large number of the interviewees appeared to be in this group and two of them, who submitted all four diaries and provided comprehensive data, were chosen to be reported.

Two cases of this group, Esra and Reha, were observed to represent No-DMC characteristics perfectly. They neither had intense motivation nor carried core features of DMC, namely, goal-vision orientedness, salient facilitative structure, and positive emotionality. However, they both appeared to be good students attending classes regularly and trying to complete their assignments. They were both 18 years-old law

department students and they would take 30% of their courses in the department in English.

In the following sections, the lack of key features of DMC in Esra and Reha's language learning journeys will be clarified by interview and diary data.

**Goal/vision-orientedness.** Both semi-structured interviews and language learning diaries revealed that Esra and Reha did not refer to any clear and precise goals related to their identities, but they stated the significance and probable advantages of learning English for them in the future. Esra's use of expressions referring to uncertainty provides support for these claims:

I think that I will use English actively because I dream about going abroad frequently in the future. I may have my MA and Ph.D. degrees there. That's why I think that I will always be in contact with English. (Esra, First interview)

Similar to Esra, Reha also did not express a specific goal that he is oriented to attain, but he talked about the global value of learning English as a lingua franca. His data also suggested that his lack of definite objectives regarding English drove him to lose his motivation and effort quite easily:

English has become a universal language in the world. It is necessary to learn English to communicate with people more easily. I have recently gained that awareness and trying to put more effort into learning English now. But sometimes I wonder what would happen if I couldn't learn English. Then, I comfort myself by thinking that it is not much compulsory for my departmental courses. (Reha, First interview)

**Salient Facilitative Structure.** Following certain study routines for the end goal, which is a significant key feature of the DMC experience, was not observed in Esra and Reha's cases. Esra stated that since she was at the A1 level, she thought that there was not much she could study, thus she did not have any routines. She completed her

assignments and practiced some of the new subjects at home, but her studying practices were shaped by her mood and willingness to do something related to English on that day (“I” stands for Interviewer, and “E” stands for Esra):

I: How do you study English? Do you have any routines?

E: I can say it depends on my mood, but I haven't started working regularly yet. So I spend a maximum of one or one and a half hours a day mostly on assignments. I can say it's due to the comfort of being at the elementary level now. I don't feel that I have to work hard. (Esra, First interview)

Reha also provided similar data about the consistency of his studying behaviors. However, unlike Esra, he was more into extra practice such as reading short stories or studying supplementary books. He still did not follow any schedules but preferred doing them with instant decisions based on his mood:

For example, if I have time, I read some story books. Then, if I have the desire to work a little more, I do exercises from the exercise book of METU. Sometimes I look at the pages that we will cover the next day and if there are many words that I do not know, I underline them and find their meanings. For example, sometimes I feel reluctant and do not spend time on these activities at all, I just do the assignments. (Reha, First interview)

**Positive Emotionality.** Qualitative data revealed that Esra and Reha had a dynamic trajectory of feelings about learning English. Esra stated that her positive emotions regarding English were initiated after she spent time on English. Learning new things in another language made her happy:

It has become enjoyable for me when I started spending time on it. It's fun right now. (Esra, First interview)

However, she was significantly demotivated by her quiz results and could not pursue her positive emotional state:

I was unhappy and hopeless. While I was happy to even try doing something in previous weeks, my grades this week made me feel depressed. (Esra, Language learning diary, week 5).

Similarly, Reha also stated at the beginning of the module that he relished learning English. However, he was depressed for the following several weeks due to quiz results and he was frustrated thinking that he would not be able to learn it proficiently:

Some issues that confused me (such as wondering if I could learn this language by the end of the year?) made me a little depressed. (Reha, Language learning diary, week 3)

The quiz affected me badly. I thought my efforts were wasted. I hit the bottom this week. (Reha, Language learning diary, week 4)

During weeks 6 and 7, Reha tried hard to compensate for the previous weeks when he felt demotivated to put in the effort. He spent a great amount of time studying for the upcoming end-of-course test. Thus, he was in positive feelings and tried to do his best. However, he realized during the last week that he had already missed the boat to be able to cover all subjects and regretted surrendering in the face of difficulties:

The increase in my motivation continued this week as well, but unfortunately, the module is nearly over. The thought that I could have gotten out of my negative feelings a bit earlier made me feel sad. (Reha, Language learning diary, week 7)

I regretted that I was a little late in attending classes again. I thought that 'I guess I missed the boat'. (Reha, Language learning diary, week 8) ***The Motivational Pattern of Esra.*** As explained in the previous section, Esra does not represent the key features of the DMC experience. The motigraph that she plotted biweekly and submitted with her language learning diaries also supported the data reported so far. From the graph below we can see that Esra had a dynamic trajectory in all three domains in the figure, namely

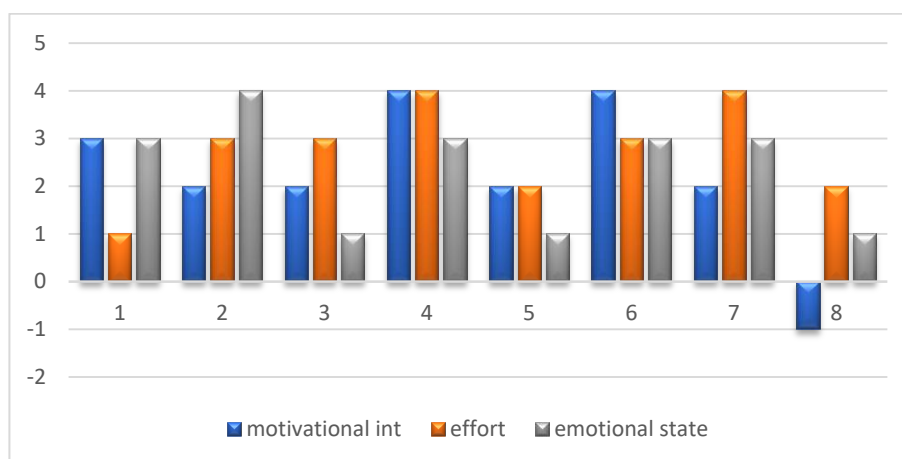
motivational intensity, effort, and emotional state. She appeared not to choose 5 in any of them throughout the period and her self-plotted scores ranged between -1 and 4.

She was observed to have the highest marks in week 4. She attributed that great shift to a quiz exam during which she could use the new vocabulary items she had just learned and felt improvement:

Being able to use the newly learned words in the exam increased my motivation. Seeing that I am no longer trapped in the past and adding new information on top of it has motivated me a lot. (Esra, Language learning diary, week 4).

**Figure 27**

*The Motivational Pattern of Esra*



The figure above suggests that week 6 was also a good one for Esra in terms of her motivational intensity in addition to her effort and emotional state. The reason for that increase was the new course she started to attend and her feeling of improvement after a short conversation with her new instructor in English:

I registered for a course. I believe that now I can spend more time on English and succeed in it. I spoke English with the teacher in the course and I was able to understand him, which motivated me. (Esra, Language learning diary, week 6).

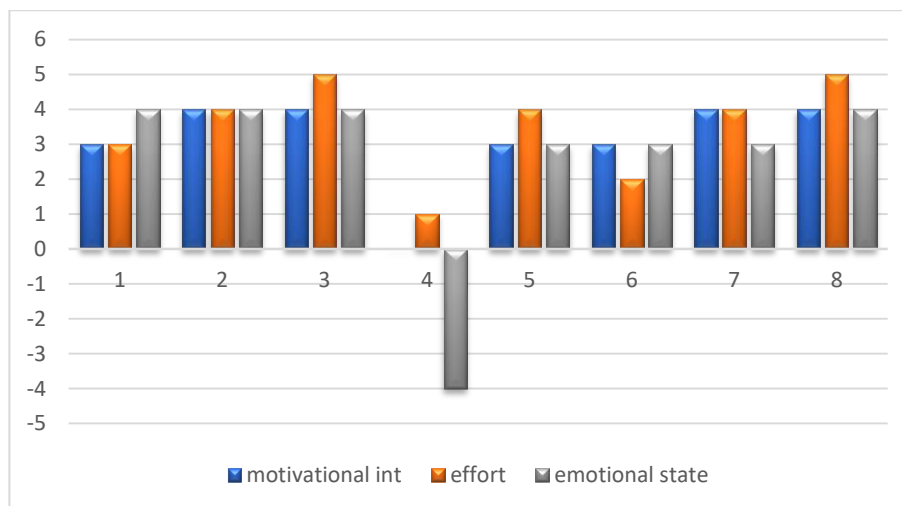


Apart from the weeks reported above in detail, Esra could not pursue a stable trajectory. The low grades she got on quizzes, feeling incompetent in comparison to some of her classmates, and some discouraging comments from instructors were the factors with adverse impacts on her graph.

***The Motivational Pattern of Reha.*** Similar to Esra, Reha also created a constantly fluctuating representation of his motivational intensity, effort, and affective state. Moreover, a wider range of scores was observed in his graph, from -4 to 5.

**Figure 28**

*The Motivational Pattern of Reha*



Looking at Figure 28 above, it is apparent that Reha started the module with positive emotions, a high amount of effort, and motivational intensity. However, he experienced a drastic fall on week 4. The quiz results that increased Esra's motivation that week led to the opposite effect for Reha and he was devastated thinking that all of his efforts thus far was wasted:

This week, quiz affected me badly. I got a very low grade and I got demoralized. My motivation was not good at all. I thought my efforts were wasted. I hit the bottom this week. (Reha, Language learning diary, week 4).

It also should be emphasized here that the -4 that Reha marked for his emotional state that week was the lowest one among the grades scored by all 9 participants of this research study.

During week 5, Reha tried to return to his previous trajectory, but he again experienced a decline during week 6 due to a speaking activity that caused him to realize that he was not good at speaking:

I felt sad when I realized that I was not good at speaking in class. (Reha, Language learning diary, week 6).

It was not until week 7 that he could finally manage to increase his motivational intensity, effort, and emotional states. The upcoming end-of-course test was the source of the improvement. Despite his rising trajectory during weeks 7 and 8, Reha expressed that he regretted being late to compensate for the weeks he felt hopeless and reluctant to study:

The increase in my motivation continued this week as well, but unfortunately, the module is nearly over. The thought that I could have gotten out of my negative feelings a bit earlier made me feel sad. (Reha, Language learning diary, week 7)

Both Esra and Reha's self-plotted graphs and diaries suggested that they were greatly affected by the momentary changes, such as a low grade on a quiz, a temporary feeling of inadequacy, or a failure in an activity. Then, they both needed a long time to be able to recover emotionally and compensate for their losses, which were not observed in DMC or partial DMC cases. The lack of a clear goal orientation can be asserted to be the most significant reason for these constant fluctuations.

### **The Role of Self-Regulated Strategy Use in Different DMC Groups**

This study was designed to include five types of self-regulation strategies which were meta-cognitive, cognitive, meta-affective, meta-social-interactive, and social-

interactive. Based on Habok and Magyar's (2018) classification, meta-cognitive strategies refer to the ones practiced to organize the learning processes through pre-planning and evaluating. Cognitive strategies pave the way for constructing and utilizing information through mental practices while meta-affective strategy use underlies the role of controlling and managing mechanisms to regulate feelings and attitudes throughout this challenging journey. To continue with meta-social-interactive strategies, they help coordinate the learning process in a communicative and collaborative environment. Finally, social-interactive strategies emphasize the role of interaction with others while learning and practicing a language.

In the quantitative data collection stage, the social-interactive and meta-social-interactive strategies were excluded from the self-regulatory strategy use scale based on the feedback from the pilot study. It was shown as a result of the pilot study that the composite survey instrument had an excessive number of items for the participants to read voluntarily and answer with genuine information. Considering that the study was conducted in an EFL setting, the social-interactive and meta-social-interactive strategies were anticipated by the researcher to be favored less during the language learning process. Thus, they were omitted from the scale and the number of items was reduced to a practical level. Qualitative data in the upcoming stages also supported the researcher's anticipation revealing that they were the least preferred strategies by different DMC groups. However, they were still reported in the qualitative stage since the circumstances they were used in provided significant information about the goals and motivations of the specific cases in that stage.

In this section, the self-regulation strategies preferred by the participants in different DMC groups (DMC, DMC-like, No-DMC, and starting in DMC-like and ending up in NO-DMC) will be presented.

### ***Self-regulation in DMC Group***

Dörnyei et. al (2015) proposed that due to the automatic and self-propelling nature of a fully-fledged DMC experience, self-regulation would not be a concern for learners in that intense motivational state. The current would flow smoothly with no external interventions required. However, the data from two DMC cases in the current study, Yunus and Ayşe, revealed that contrary to Dörnyei et. al's (2015) strong suggestions about the redundancy of self-regulation in DMC experience, they both appeared to utilize self-regulated strategies in numerous contexts. While different types of strategies were observed in the data, two of them stood out: meta-affective and meta-cognitive.

**Self-regulation via Meta-affective Strategies.** Meta-affective strategy use denotes controlling and managing emotions via specific strategies throughout the learning process. Although positive feelings were defined by Dörnyei et al. (2015) as the magic component of DMC fuelling the current, emotion labor of that intense and long-term experience cannot be denied. Sustaining such a strong motivation for lengthy periods until reaching the end goal was likely to cause feelings of tiredness and stress at some points and emotion regulation could be needed by the learners, which was supported in Yunus and Ayşe's data. The data provided by the two DMC cases indicated that regulating emotions via meta-affective strategies was how they were self-regulated most commonly.

Adopting positive self-talk to relax and overcome obstacles was observed several times in both DMC cases. It appeared to be utilized in various formats with different purposes as a result of the analysis. First of all, Yunus and Ayşe preferred positive self-talk to remind themselves that they can succeed if sufficient time and effort are invested by them. The passages below clearly demonstrate how they encouraged themselves to sustain the intense motivational current efficiently:

I couldn't speak in the quiz as I wanted at that moment; I was kind of stuttering. After an hour or two I thought and said that it was not the end of the world, of course, it was a sign for me. So I have to study harder for speaking. After that, I felt much better. My motivation is the same, so it's good. (Yunus, Follow-up interview)

I sometimes worry about making mistakes. When I see some new words, I feel panic and start thinking “Oh this is very hard”. But then I say to myself “Ayşe, you can do it. Nothing is easy in this language. So, you can do it, don’t be afraid. Just try doing it”. (Ayşe, First-interview)

When I finished the exam I thought that everything was going to be good. But, when I was sleeping, I got a message and I saw my score. I panicked and thought “Why? What is wrong with you A?” Then I tried to calm myself, I told myself that I still have time. I can still make up for it to pass the exam so no worries. It tried to forget negative things (Ayşe, Follow-up interview)

In line with positive self-talk as a meta-affective strategy, Yunus also tried to think about his previous achievements to remember his potential and inspire himself to continue in cases of break downs as well:

I reminded myself that I am a person who has survived the pre-intermediate level. At first, I had a hard time in the pre-intermediate level as well. Of course, I will have difficulties here as well at the intermediate level. We are only human. When we start something new, our brains cannot adapt immediately. I said I'll get through this too. Let me work. After all, people succeed when they work. After that, my emotional state got much better. (Yunus, Follow-up interview)

Comparing himself to other learners in his class to position himself in that context was another way of emotional self-regulation for Yunus. Since he had a great desire to be the best in everything he strives for, he expected to do so in his language classes as well. However, realizing that he had extremely perfectionist criteria for success, he preferred leaving his own judgments about himself aside and following the standards of his school, teachers, and classmates. With that perspective, his emotional well-being tended to improve seeing that he was, in fact, much better at learning L2 compared to his classmates. In addition, watching YouTube videos about some disadvantaged

communities in terms of education, he compared his educational and intellectual capital to theirs and felt grateful for his opportunities, which also influenced his feelings in the intense motivational current positively:

When I observed the general situation in class and the people at that level, I realized that I was quite good. I thought that I shouldn't care much about my own criteria for being good or not. Looking at the class in general, I started to have positive feelings and persuaded myself that I am good. (Yunus, Follow-up interview).

I used to increase my motivation by watching videos on Youtube. How can I say, there are some Youtubers for example. They tell things that describe the general condition of the people. For example, there is a community who are poor or some people in Turkey cannot reach education. They want to study but they have to take care of their families. They can't get an education, they work for it, but they can't get it. As I saw these, I thought that this is not a gift given to me, it is a chance. I remind myself that if I can get this education here right now, it's a one-in-a-million or one-in-a-billion chance. I was motivating myself by thinking about these and comparing myself to these disadvantaged people. (Yunus, Follow-up interview).

Finally, Ayşe seemed to apply positive self-talk as a meta-affective self-regulation strategy to encourage herself not to hesitate about making mistakes, especially while speaking. As mentioned before, oral communication was significant for Ayşe since she intended to move to the USA and have a job there. Thus, she was trying to practice speaking frequently to reach her goal. In line with these purposes, she aspired to regulate her feelings via meta-affective strategies to practice further without fear:

I always encourage myself to speak and think in English as much as I can. I try not to worry about making mistakes. I always remind myself that I am here to learn

and to make mistakes. Nobody is perfect. (Ayşe, Language learning diary, week 1).

**Self-regulation via Meta-cognitive Strategies.** Self-regulation via meta-cognition refers to adopting strategies to coordinate the learning processes via organizing and evaluating. In this study, Yunus and Ayşe appeared to be highly organized learners trying to manage their learning processes efficiently. In addition to the planning stage via meta-cognitive strategies, Yunus seemed to benefit from self-regulation to overcome the difficulties he experienced in the current, and Ayşe resorted to it to investigate how to be a better learner of English. The excerpts below demonstrate their uses of meta-cognition:

For example, I say that tomorrow after school I will work on these and these. I always think about these before I go to bed. I do plans for tomorrow, I create them in my mind and I go to bed. When I wake up tomorrow, all I have to do is do them. (Yunus, First interview)

Now I am in the upper, I make my own schedule. For example, on Mondays, I will study grammar and some kind of extra reading that is not in the book. And then my plans go like that for Tuesday, Wednesday, Thursday, etc. On Fridays, I cover all the notes I take in class during the week. (Ayşe, Follow-up interview)

While the two passages above reflect the significance of meta-cognition in Yunus and Ayşe's learning processes to have a well-designed schedule before studying, the following ones display how Yunus overcame some obstacles utilizing meta-cognitive self-regulation strategies to sustain the current for longer periods:

This week I had some difficulties studying. But, I could overcome the problem by planning for myself or by coming up with clever solutions to the problem. (Yunus, Language learning diaries, week 4).

I started to prepare a vocabulary book when I was in the pre-intermediate class. But things went very complicated because I was inexperienced then. For example,

I was writing everything in the same notebook. It was very confusing. Then, before I pass to the intermediate level, I thought about how it could be much more practical and clear. To avoid confusion, I prepared separate notebooks for the grammar, phrasal verbs, adverbs, and adjectives. So I started to learn more easily. (Yunus, Follow-up interview)

Trying to be a better learner of English was a significant reason in Ayşe's case to exploit meta-cognition. She was highly willing to find out different ways of improving her skills in L2. In addition to following her routines in the current, Ayşe always sought alternative ways to excel in that process. Consulting people advanced in the English language was the most frequently adopted strategy by her. She even asked for some advice from the interviewer before ending the meeting:

Everyone I met I ask "how can I improve my English, what should I do, do you see any improvement in my English?" etc. And they all tell me positive things such as "you are okay, do these and these things, you should listen, you should write, you should do the bla bla.... (Ayşe, First interview)

I: Is there anything you want to say before finishing our interview?

A: Like always, what should I do to improve my English? (Ayşe, First interview)

**Self-regulation via Cognitive Strategies.** Self-regulation via cognitive strategies implies utilizing mental processes which enable learners to create, transform, and apply L2 knowledge. Contrary to the abundant use of meta-cognitive and meta-affective strategies by Yunus and Ayşe, cognitive strategies were not preferred that frequently.

The results of qualitative data analysis suggested that Yunus employed cognitive strategies for permanent vocabulary development. Using new words in context to practice them and making use of visuals to remember them were the ones adopted by him. The following two quotations display his use of cognition in vocabulary learning:



I write the meanings of the words in English. And then every day, I try to write sentences as much as I can. (Yunus, Follow-up interview)

If there is a concrete word, I try to search for it on the net, look at its pictures and try to memorize it. For example, if the word is “embassy”, I find a picture of an embassy. If “research” is the word, to understand it, I look at a picture of a man doing research. I tried to memorize words with pictures. (Yunus, Follow-up interview)

Unlike Yunus’s case, Ayşe did not concentrate on a specific skill via cognitive strategy use but focused on all to improve her English. Doing revisions regularly was the only cognitive strategy adopted by her. The excerpt below demonstrates Ayşe’s use of revision as a cognitive strategy:

I revise what I learned in class, not for the exam but to improve my English. (Ayşe, Follow-up interview)

**Self-regulation via Social-interactive and Meta-social-interactive Strategies.** A close investigation of qualitative data displayed that Yunus and Ayşe differed from each other in terms of their uses of social-interactive and meta-social-interactive strategies to regulate their learning processes. Communicating in L2 to learn it was the least frequently reported self-regulation strategy in Yunus’ case. Contrary to his recurrent use of meta-cognitive and meta-affective strategies in numerous contexts with different purposes, social-interaction in L2 was mentioned just once in his data and not as a quite positive experience:

There are international students in my dormitory. I used to talk to them to practice speaking. However, I realized that since English was not their native language, they did not have a good accent. Thus, I stopped practicing with them not to be influenced by their poor pronunciation. (Yunus, Follow-up interview)

As clarified in the passage above, Yunus declared that he tried to speak in L2 with international students in his dormitory. However, he realized that these students were not good at pronunciation. To abstain from learning wrong things from them or being negatively influenced by them, he stopped communicating with them in L2. Meta-social-interactive strategies were not adopted by Yunus at all, which was quite predictable considering his rare use of social-interaction to learn L2.

On the other hand, Ayşe turned out to be a social learner organizing the interaction process to create a new routine for her. During the first-interview, she talked about her intentions to find a native English speaker to exercise speaking. She was quite enthusiastic about improving her oral communication skills due to her goals of living in the USA in the future. The follow-up interview with Ayşe revealed that she had succeeded in that plan and started practicing with a native speaker regularly. The following passages reflect her uses of self-regulation to improve speaking:

Learning new languages is not easy but it's fun and exciting. I just try to speak as much as possible without any worries. (Ayşe, Language learning diary, week 5).

I: Do you mean that you need to increase your effort?

A: Yes, for example, if I find someone, if I get someone who speaks English well like a native, someone who gives me his or her time, it will be great. (Ayşe, First-interview)

I met a friend who is a native speaker so I practice English with him every day. That's what makes me happy. (Ayşe, Follow-up interview)

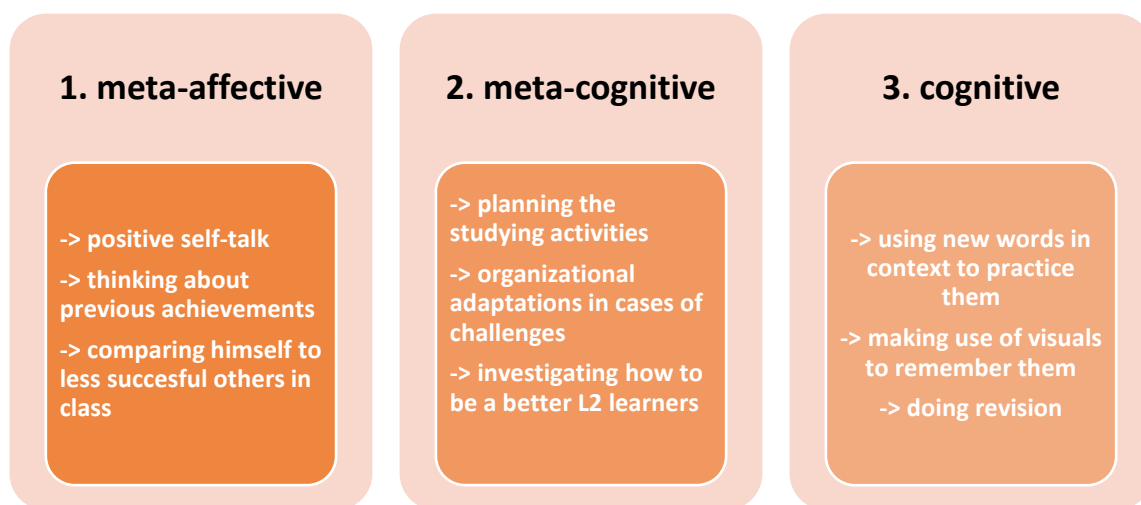
To summarize, the data from two DMC cases in this study displayed occasional use of self-regulation by these learners in numerous contexts. Though different types of self-regulation strategies were observed in the data, meta-affective strategy use stood first helping the learners overcome the emotional challenges of pursuing such an intense current to reach a significantly valued end goal. Self-regulation via meta-cognition was the

second preferred one by DMC cases and it was utilized to organize the lengthy process of intense motivation, to overcome some difficulties about following the study practices, and to be better learners in the current. Cognitive strategies appeared to be adopted rarely in both cases. While Yunus preferred cognition to learn vocabulary, Ayşe did revisions to reinforce her knowledge.

Both Ayşe and Yunus followed similar patterns in terms of the rate of self-regulation via the previous three strategies: meta-affective, meta-cognitive, and cognitive. However, they diverged from each other in social-interactive and meta-social-interactive strategies used to regulate their learning. While Yunus seemed not to prefer them often, Ayşe was a social learner resorting to both to improve her oral communication skills.

### Figure 29

*A Summary of Self-regulatory Strategy Use in DMC Group*



The summary of the self-regulatory strategy use in the DMC group can be viewed in the figure above.

### ***Self-regulation in DMC-like Group***

Following the detailed description of three DMC-like cases, this section is devoted to their self-regulated strategy use. A close investigation of qualitative data revealed that

cognitive and social-interactive strategies were the two most popular types of self-regulation strategies in that group and the frequency of them appearing in the data was not much different. Meta-cognitive and meta-affective strategies followed them in terms of popularity while meta-social-interactive strategies seemed to be the least preferred ones in that specific group.

**Self-regulation via Cognitive Strategies.** Data retrieved from semi-structured interviews and language learning diaries of three partial DMC cases in this study, Hakan, Peri, and Faruk, suggested that cognitive and social-interactive strategies were favored most by them throughout the 8 weeks of study. Incorporating the least favorite skills into the favored ones to practice more effectively, using new vocabulary items in different contexts and finding meanings of words, and preparing vocabulary notebooks were the cognitive strategies mentioned by Hakan, Peri, and Faruk.

Hakan utilized cognitive strategies to integrate the skills that he does not enjoy much into the others that he likes so that he could practice his least favored skills as well. To be more specific, Hakan stated that he did not enjoy studying mechanical parts of language, namely grammar. However, he was a fan of communicative skills. Thus, he tried to practice new grammar topics each week via speaking rather than doing mechanical exercises on books or worksheets:

I love speaking; I don't like grammar at all. That's why I'm trying to reconcile speaking with grammar. For example, when speaking, I always use the structures we learned that week. I can form the sentence in different ways as well, but I somehow form that sentence with the new grammar structure so that I can repeat the grammar and do what I love. Let's say I learned a new tense, I try to use that tense. (Hakan, First interview)

On the other side, Peri and Faruk utilized cognitive strategies to learn vocabulary and practice them for longer-term attainment, which was the most common use of

strategies in that study. To clarify, considering all four DMC groups and nine different cases, cognitive strategies appeared to be the most commonly favored ones in the study, and vocabulary learning was the main focus of these strategy uses. In line with that common preference, Peri and Faruk also reported similar inclinations:

In my concrete studies, I find different forms of the new vocabulary such as their adverb forms, noun forms, etc. I try to use them in sentences and I keep a vocabulary notebook. I try to write sentences. And I study the tenses in the same way by writing. (Faruk, First interview)

I prepared a vocabulary notebook and mainly focused on it. (Peri, Language learning diary, week 6)

I do revisions and find the meanings of the new vocabulary that I do not know in the course book. (Peri, First interview)

**Self-regulation via Social-interactive Strategies.** Social-interactive strategies refer to learning L2 in interaction with others and they appeared to be utilized by the DMC-like cases in the study. Considering that Hakan was a social learner by nature and also planned to join Work & Travel program, Peri wished to join the Erasmus program to study abroad and Faruk needed to contact several international people during his internship, it would not be speculative to state that oral communication skills were highly significant for them and they aimed to improve themselves via practicing social-interaction during their prep-school year.

To start with Hakan's experience, it would be possible to state that he enjoyed learning English by speaking all the time. It was a real pleasure for him to communicate in L2 during classes, self-access-center speaking sessions, and also with friends after school or even during breaks. He preferred not to speak Turkish with his Turkish friends if they were able to speak English. He even incorporated some kind of role-playing into his practices to use it out of school contexts as well:

First of all, I try not to speak Turkish as much as I can at school. For example, we as two or three friends, sometimes walk to Kızılay from here when the weather is good, we don't go by bus. For example, if it takes half an hour, we speak English all the time while walking. We do the daily conversation in English. Sometimes they even suggest that since I am good at acting I play the role of a foreigner in the restaurants we go to, so we talk in English again. We do that a lot. (Hakan, First interview)

I try to speak in English with my friends in all kinds of social environments. (Hakan, Language learning diary, week 1).

Faruk was aware of the fact that it would be possible to speak L2 fluently only after practicing without hesitation. Thus, he tried to speak as much as he could and did not worry about his inaccurate uses but focused on correcting them to improve his communication skills:

The technique I use most is talking, making mistakes, and speaking without fear. Just like a baby cannot walk without crawling or falling, it is also difficult to learn a language without speaking and making mistakes. This is a very useful method for a person like me who loves communication. (Faruk, Language learning diary, week 1)

Lastly, Peri preferred practicing her speaking skill with international people in the dormitory and also on online platforms. She had found a language learning application and made international friends via it to practice speaking. Since joining the Erasmus program and going to England was one of her long-term goals, she was willing to improve her oral communication skills and, unlike Hakan, she preferred international people for that:

I talk to my international friends at the dormitory. I think that my language skills are improved that way. (Peri, Language learning diary, week 2)

I continue practicing with my international friend. I do a lot of speaking and writing practice with him. (Peri, Language learning diary, week 3)

***Self-regulation via Meta-cognitive Strategies.*** Meta-cognitive strategies were the third preference of partial DMC cases. While Hakan utilized meta-cognition to create more opportunities for himself to be in contact with L2, Faruk needed it to overcome some challenges that he faced during the intense learning process. Peri talked about using meta-cognitive self-regulation to plan her time and studies.

The extracts below demonstrate Hakan's meta-cognitive self-regulation processes to increase his exposure to L2 in various contexts:

I changed the language settings of my mobile phone. (Hakan, Language learning diary, week 2)

On the way home, I try to read something in English on Instagram, Twitter, and some other social media pages. (Hakan, First interview)

Unlike Hakan, Faruk needed to make some adaptations in his learning process to overcome some obstacles. To clarify, he had some problems with new grammar topics in week three and his previous study practices did not help him to understand the topic. Thus, he decided to increase the time he spent on grammar in addition to trying different supplementary materials:

I: For example, when I asked you to talk about the difficulties you had in the third week, you mentioned that there were new grammar issues and you had difficulties with that. What did you do to overcome this challenge?

F: I increased the time I spent studying grammar by one hour when I was at this (pre-intermediate) level. I did as follows: I examined the things I was studying. Then I thought about what I could work on, what I could do. I had taken my brother's old supplementary books a month and a half ago, and I started studying them. There was a book called "Fundamentals". I focused on extra exercises much

more because the more samples I would see the better. (Faruk, Follow-up interview)

Faruk stated that he had to change his study routines for the consolidation tests as well. Consolidation tests were quite comprehensive quizzes, and unfortunately, Faruk would usually get lower grades than he expected. Then, he started to think about the reasons behind his failure and realized that he would stick to just one resource, mainly the coursebook, to study for it and not see any different contexts for the new grammar topics, vocabulary items, or different skills. Thus, he started using the internet for different resources and increased his exposure to variety:

I changed my studying style because when I first took the consolidation tests, I wasn't successful and I couldn't understand why. I was only following the course book to study for the consolidations. However, the questions they asked in these tests were very different from the things in our course book. This was the reason why I failed badly in the exam. I understood that it was necessary to look at the topics from different perspectives, and I tried it. I found exercises on the Internet. There are various questions about the subjects on the internet. I saw 3-4 different types of questions, I started to study them. In the past, I used to focus on a single resource, I would study it and finish it. But it was not enough anymore. (Faruk, Follow-up interview)

Lastly, Peri talked about planning and sticking to her plans as a meta-cognitive strategy to have a balanced time distribution between her daily life needs such as socializing with friends and her language studies:

I: I'm a bit of a planner, you know, when I say I'm going to do that, I do it right away. Then, I spend time with my friends again.

I: You organize things all in one way or another.



P: I'm just a little... let's call it an obsession. I don't want my plans to be disrupted.  
(Peri, First interview)

While Peri preferred meta-cognitive strategies to organize her time and studying practices, Hakan and Faruk needed to think about how to increase their exposure to L2 or solve some obstacles they encountered during their journey to the end goal.

**Self-regulation via Meta-affective Strategies.** Analysis of the data revealed that meta-affective strategies were one of the least utilized types of self-regulation strategies by partial DMC learners in the study. However, they were still preferred in cases of breakdowns by the two participants to keep their partial current to reach their goals. While Hakan used self-talk to remind himself of his priorities, Peri preferred taking time for herself to relax via more enjoyable activities. Faruk did not mention any type of meta-affective strategy used at all.

It was well reflected in the motivational pattern of Hakan (see Figure 22) that although he had some fluctuations in his motivational and affective states, his effort trajectory was quite stable. When asked about that interesting finding during the follow-up interview, Hakan stated that despite the emotional challenges during some periods, he tried to remind himself that he was in prep school to learn English and he had certain goals for his future regarding English. Thus, leaving the current or his goals was not an option for him since he did not have any other priorities to focus on during that year:

I: You continued to make effort during the week when your motivation was low.  
How did you do this?

H: I continued but, for example, at the pre-intermediate level I was willing to continue. At the end of the intermediate level also I wanted to come to school all the time. But during that week (around the middle of the intermediate module) I didn't want to come to school at all. My motivation was low. But the thing is that this year I only have English to study and learn. So I was thinking that I had to try

because I didn't have any other thing to study. I always asked myself "What are you going to do? Will you stay at home all day?" So I had to do something. (Hakan, Follow-up interview)

Unlike Hakan, Peri tried to overcome her challenges by taking some time off from her study routines and going shopping. Although the quotation below does not clearly state that she felt much better after shopping, it can be deduced to mean so considering the context in which it was used. Her motigraph had shown that she had some breakdowns during that week due to a quiz and she was not feeling comfortable about it. Considering that she used the strategy during that week and seeing the increase in her motigraph in the followings week, it can be deduced that her meta-affective strategy use helped her return previous positive trajectory:

I: Can you explain your feelings related to the language learning processes of last week and this week? How did you feel? Did you do anything to change your feelings or keep them under control? If yes, what did you do?

P: I took time for myself. I went shopping; it's always like therapy for me. (Peri, Language learning diary, week 2)

Remembering the emotional breakdowns Faruk experienced during weeks 6 and 7, it was interesting that he did not talk about the meta-affective strategy used to regulate this process. Thus, it can be asserted that maybe he was not knowledgeable about them or could not make use of them effectively.

**Self-regulation via Meta-social-interactive Strategies.** Finally, meta-social-interactive strategies, which refer to coordinating the learning process in a communicative environment, were not much popular for DMC-like cases in this study but were still utilized in two cases. Similar to Ayşe in the DMC group, Peri also utilized that strategy to find a native speaker to practice her oral communication skills. Considering that they both aimed to go abroad for some reason, the similarity in their priorities was quite predictable.

However, unlike Ayşe, Peri preferred online platforms to reach that goal most probably because it was more practical:

I made a new friend via the Hellotalk application and I was doing speaking and writing practices with him. As my friend does not speak Turkish at all, this has been an effective method for me and I continue doing that. (Peri, First interview)

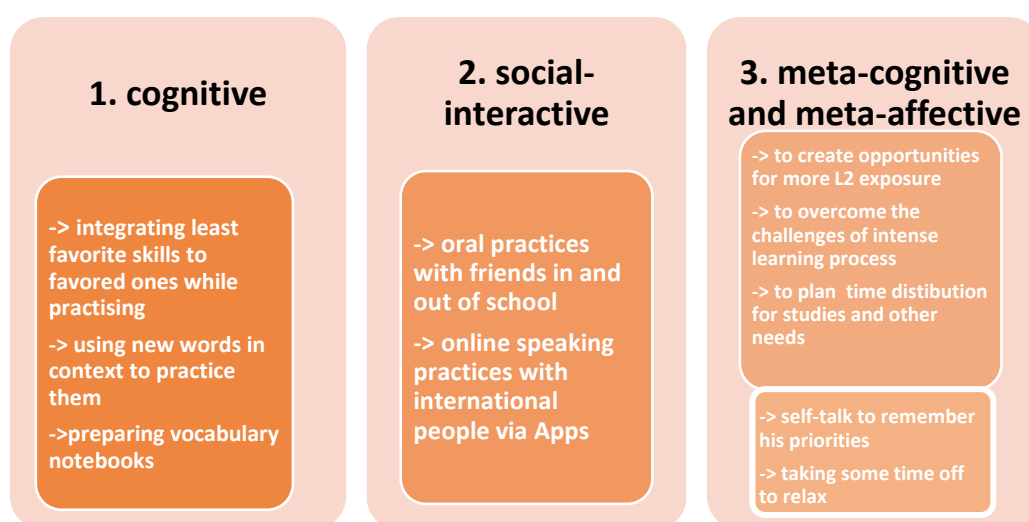
Hakan used a meta-social-interactive strategy to find speaking partners among his friends. He already enjoyed interacting in L2 with his close friends and he pursued that via phone when he was away from them as well:

I talk a lot while walking on the street, on the way home. For example, I call my classmates and we speak in English. Even if they don't want to, I force them to speak somehow. (Hakan, First interview)

The fact that Faruk did not talk about any volitional act to use meta-social-interactive strategies to improve his communication skills can be attributed to the fact that he is included in two internship programs where international people are already available and he does not need to try hard to create communicative environments.

### Figure 30

*A Summary of Self-regulatory Strategy Use in Partial DMC Group*



The summary of the self-regulatory strategy use in the partial DMC group can be viewed in the figure above.

***Self-regulation in the Starting in DMC-like and Ending up in No-DMC Group***

Two cases in that group, Oya and Melis, appeared to prefer cognitive strategies in the very first place followed by meta-cognitive and meta-affective strategies. No use of social interaction was observed in their data as a language learning strategy.

**Self-regulation via Cognitive Strategies.** Similar to the three cases in the previous section, Oya and Melis also resorted to cognitive strategies mainly to learn and practice vocabulary items. Writing down new words and trying to use them in sentences, finding different forms of the words (word classes), and preparing flashcards for further practice were some of the cognitive strategies utilized by them:

One method that I used for memorizing the words was to use them in many sentences. Besides that, I searched for the other forms of the words (noun, adjective, etc.), and they were effective for me to memorize the words easily. (Oya, First interview).

I prepared vocabulary flashcards. I first read through the units and chose the words to write on these cards. I wrote them only in English. I repeated them unit by unit at the beginning. After a while, I started to combine them adding each new unit to the previous ones. (Melis, Follow-up interview)

In addition to vocabulary practices, talking to themselves in English or thinking about what to say in some situations in English were some other cognitive actions conducted by Oya and Melis. They both stated that they did not have many opportunities to speak in English outside the school, but they would do it on their own just like a soliloquy:

There is no one I can practice speaking with. I am on my own. But, when I talk to myself, I prefer speaking in English. (Oya, First interview)

I don't have many foreign friends. When I come home, I try to practice on my own like "I came home, I ate bla bla, I did this today". Before going to bed, I talk to myself about what I did today. (Melis, Follow-up interview)

**Self-regulation via Meta-cognitive Strategies.** Meta-cognitive strategies were the second preference of the cases starting in DMC-like and ending in the No-DMC group. Oya made use of meta-cognition to increase her exposure to L2 via different resources and also make the learning process more enjoyable for her:

I started to read some extra books to enhance my reading, vocabulary, and writing skills. (Oya, Language learning diary, week 3)

So, as I told you before, if something is not enjoyable, I have to make it so. Fun, hobbies for me. Otherwise, it's really hard for me to memorize. I cannot mechanically memorize things. So, I just want to enjoy it when I am doing something. When I don't enjoy it, I have to find different ways to make it fun for myself. This is my strategy. (Oya, First interview)

Oya stated that she was an optimistic person trying to find a positive side in every experience. Thus, it can be deduced that she exploited her optimism to enjoy even the "dull" parts of the learning process in her terms.

On the other hand, Melis searched for how to be a better learner and also scheduled her studies for the following days or even for weeks via meta-cognitive actions. The extracts below exemplify her typical practices of meta-cognition:

I read a lot on the internet about how to become B1 learners, and how to be at the B1 level, especially in writing. (Melis, Follow-up interview)

I am a person who likes studying within a plan. For example, when we planned this meeting with you, I wrote it immediately in my notebook in order not to schedule anything for that time. I determine the things I will do each day. For example, weekly or monthly, you have to study this, you have this exam in front of you, for

this, you need to do the following, etc. Before I start the day, I make that day's schedule. For example, study grammar today, study reading here today. I keep them in my notebook like this. I don't know, I like it that way. I plan it, I feel like I can catch up with everything that way. (Melis, First interview)

**Self-regulation via Meta-affective Strategies.** Although data revealed that meta-affective strategies were observed in that group, a closer investigation displayed that only Melis preferred them while Oya did not mention them at all. That was an interesting finding considering the emotional instabilities experienced by Oya right after checking a sample proficiency test that literally scared her. Although she had asserted being an optimistic person trying to see things with a positive perspective, it can be speculated that the proficiency test was extremely beyond her expectations in terms of difficulty level, so she could not handle regulating her emotions and just gave up. Another possible explanation could be the feeling of tiredness felt through the second half of the module that hindered her efforts to regulate her feelings.

Unlike Oya, Melis reported benefiting from meta-affective strategies several times during interviews. Comparing herself with the others in her class which eventually led her to make a positive evaluation of her abilities was one of her practices of meta-affective strategy use:

I had great difficulties speaking during the first two weeks. Everyone in the class was speaking English, but I realized that they don't speak well. For example, one of our friends speaks a lot in class, but I saw that he rarely uses correct grammar. He doesn't pay attention to grammar, his pronunciation of words is ridiculous, and he repeats the same things all the time. But these do not stand out because he speaks fast. On the other hand, I was always trying to use grammar correctly and pronounce the words very well, which all made me nervous about speaking. Then I realized that they don't actually speak very well and I said "Then you can do it too. (Melis, First interview)

Similar to DMC-cases, Yunus, and Ayşe, Melis also utilized positive self-talk to regulate her emotions in cases of breakdowns:

I: When we first met at the beginning of the term, you said that you enjoy learning English. Then, what kind of changes have you experienced in your state of enjoyment during the previous module? How was the process?

Me: I didn't enjoy it at all for the first three or four weeks or even a month. I was questioning why I was coming to school. I was in such a hopeless mood. Then, around two or three weeks before the end-of-course exam, I said to myself that I needed to do something. I got a low score on my second quiz at that time. I'm a person who cries a lot when I am upset or angry. It's not an ordinary one but it is intense. I cried like that, in a very different, intense way of crying. After that, I woke up in the morning and said to myself "Yesterday is gone. Nothing is finished now." I said, "If you get higher in the end-of-course test, you will pass." So did I. (Melis, Follow-up interview)

Finally, Melis seemed to apply some affective self-regulatory strategies to mitigate the perceived negative side-effects of that intense motivational current (e.g. feeling tired). Although she was not a pure DMC case, she had started the period in the DMC-like group with high motivational intensity and she seems to be aware of how challenging it would be to study day and night for the end goal. Thus, she sometimes made a conscious decision not to study and take some time off to refresh her mind and energy. She can be suggested to have provided a good example of how meta-affective self-regulation operates within DMC or partial DMC experiences:

I: Well, for example, you said that you spend about 10-11 hours a day in English. How do you feel if you can't or don't do this?

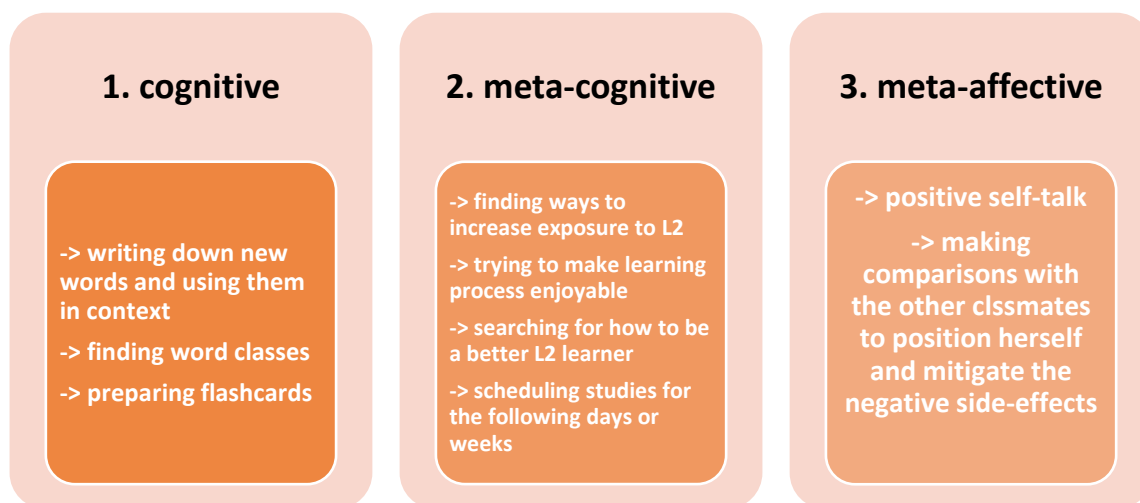
Me: I feel guilty. Because I say to myself, did you start with these intentions? I kind of blame myself for being lazy. On the other hand, for example, sometimes I don't

want to do anything. Because I encourage myself to take a break because studying all the time is also tiring. I need to renew myself; I need to renew my brain. (Melis, First interview)

The fact that social-interactive and meta-social interactive strategies were not preferred by the two cases could be due to the lack of international people around them that they would feel comfortable talking to. They also were not observed to be enthusiastic about finding oral communication partners and practicing speaking.

### Figure 31

*A Summary of Self-regulatory Strategy Use in Starting in DMC-like and Ending in No-DMC Group*



The summary of the self-regulatory strategy use starting in the DMC-like and ending in the No-DMC group can be viewed in the figure above.

### ***Self-regulation in No-DMC Group***

Data from two No-DMC cases in the current study, Esra and Reha, revealed that they both appeared to utilize self-regulation in numerous contexts. While different types of strategies were detected in the data, cognitive strategies stood out due to their high-frequency use of it. Meta-affective strategies followed it and it was mostly utilized by Reha. Meta-cognitive and social-interactive strategy uses were also observed in the data.



**Self-regulation via Cognitive Strategies.** Cognitive strategies referring to the use of mental mechanisms for constructing and transforming knowledge were the most commonly preferred ones. They were utilized by both Esra and Reha with equal distribution. Both participants resorted to listing new vocabulary items and analyzing the contexts they were used in. While repetitions were also used by Esra, Reha preferred memorization and fragmenting sentences to comprehend more easily.

To report the cognitive self-regulated strategy use data in more detail, writing down newly learned words into their notebooks and studying the contexts they were used in were quite popular for both cases:

I listed the new vocabulary in the unit and then analyzed their contexts. (Esra, Language learning diary, week 4)

For the end-of-course test, I especially studied vocabulary. I wrote them down and examined the contexts they were used in. I think they worked. (Reha, Language learning diary, week 8)

Esra stated several times that she would repeat the pronunciation of new vocabulary items after her instructors, lines of a film or TV series after the actor/actress, or lyrics of a song after the singer. In doing so, she aimed at practicing and internalizing them to identify and remember more easily when needed:

I pay attention to the pronunciation of my teachers and repeat them so that I can fully internalize them. (Esra, First interview)

I increased the time I spent watching series and films. I repeated the lines in them. I think that helped me for speaking. (Esra, First interview)

On the other hand, Reha utilized memorization and fragmenting strategies respectively to learn new vocabulary items and to understand complicated sentences:

I focused on the vocabulary that was likely to be asked in the exam. I memorized words in the course book. (Reha, Language learning diary, week 8)

At this level, sentences got a little longer. I was reading the sentence and then I was creating a template in my head such as “These are the events, this is the time, these are the people, etc”. After doing that, I was reading the sentence again slowly and step by step. I couldn't understand them all at once. I was reading slowly and seeing the words, thinking about the meaning of the words, and creating the sentence in Turkish in my head. I was afraid to see the whole sentence and try to understand it at once. If it's a very long sentence, it has no beginning and no end for me. But that's how I started to understand. I started to do this at the pre-intermediate level. (Reha, Follow-up interview)

**If-regulation via Meta-affective Strategies.** Qualitative data revealed that both Esra and Reha needed meta-affective strategies to regulate their feelings and motivation throughout the period. While Reha was a more frequent user of it, Esra referred to them just once and talked about positive thinking as a strategy:

I tried to keep my emotional state quite positive and convince myself that failure should not affect me. (Esra, Language learning diary, week 1)

Interestingly, Esra talked about emotion regulation right at the beginning of the module, which leads to the assertion that via positive thinking she aimed at being prepared for the challenges of the upcoming module. Unlike Esra, Reha utilized meta-affective regulation via positive self-talk to overcome the emotional challenges after he faced them. The extract below summarizes Reha's feelings of inadequacy after meeting his friends who passed prep class and now study in their departments. Talking to them, Reha regretted that he had not learned English at high school and had to study prep class. However, he did not let these negative feelings continue for a long time and tried to

get rid of them by focusing on his improvement since the beginning of the prep school year (“I” stands for Interviewer, and “R” stands for Reha):

I: Well, what do you do when you get depressed?

R: These feelings continue for a while. Sometimes it takes a few hours. Then I read something simple. I say to myself “Read something simple. Can you read? Yes, you can read. It means you have progress. You weren't like this when you first started; you didn't know anything. Now you know something.” When I realize that I have made progress, when I understand it, I feel happy again. (Reha, First interview)

Other than his friends in the department, Reha compares himself to more advanced-level speakers of English than him and feels hopeless. To overcome these feelings, he utilizes positive self-talk to remind himself of the natural and long-term process of language learning:

R: I see teachers or people at more advanced levels. They speak English fluently. I wonder whether I'll be able to speak like them or not and I feel a little disappointed.

I: So what happens after that?

R: Then I say that they were not born abroad after all. They also grew up in Turkey. They also passed this level, maybe they passed a little earlier than me. While learning a language, even a young child, a 4-5-year-old child, cannot speak like us. They start with simple sentences. In other words, they improve themselves as they are exposed to the language. That's how I motivate myself. (Reha, First interview)

Lastly, Reha tries to regulate his negative feelings such as boredom by studying subjects he enjoys more so that he can continue without giving long breaks:

I was bored with the subject. I changed the subject and studied for something different. (Reha, Language learning diary, week 5)

**Self-regulation via Meta-cognitive Strategies.** The use of meta-cognitive strategies to organize their learning processes was preferred by both cases in the No-DMC group. Esra utilized meta-cognition to learn how to be a better learner of English. She also practiced categorizing and underlining strategies while learning vocabulary. Reha, on the other hand, focused on scheduling what to study as well as thinking over some problems regarding his study plans.

Esra stated that she took a test to learn the match between her learning practices and the type of learning style appropriate for her intelligence. In doing so, she expected to be able to study more effectively in line with her intelligence. The test result was pleasing to her and she changed her learning style:

I took a test to change my learning strategy and found out that I have visual intelligence. I have gained self-confidence because the problem was not about me but about my learning style. My motivation increased. I had the opportunity to try different ways to learn English. (Esra, Language learning diary, week 2)

In addition, Esra utilized categorizing strategy for a more effective vocabulary learning process. She tried to differentiate between the new words that need more attention for future benefits and the ones that can stay in her temporary memory to be retrieved only in cases they are needed:

I focused on vocabulary categorizing them as the ones that should stay in my temporary memory and the ones that are important to me, in the long run, to use frequently. I think it is more useful than rote memorization. I can clearly see what is important and what is not. (Esra, Language learning diary, week 4)

On the other side, Reha preferred planning and organizing his studies concentrating on specific skills and materials within a schedule:

At first, I was like this: let me devote myself to grammar, and learn a lot of things and patterns. At school, we were doing very simple things at first, but I already knew them. Then I said I'll study myself. I bought a book; I studied and learned a lot of grammar patterns. I went far ahead. I stopped grammar after that because I had gone too far. Then, I thought that I know structures, but I can't form a sentence because I don't know enough vocabulary. I immediately bought books and started reading them. (Reha, First interview)

The extract above clearly shows that in addition to determining what to study, Reha was also seeking to resolve issues via meta-cognition. Reflecting upon his strengths and weaknesses and making arrangements in line with them was a great example of meta-cognitive strategy use.

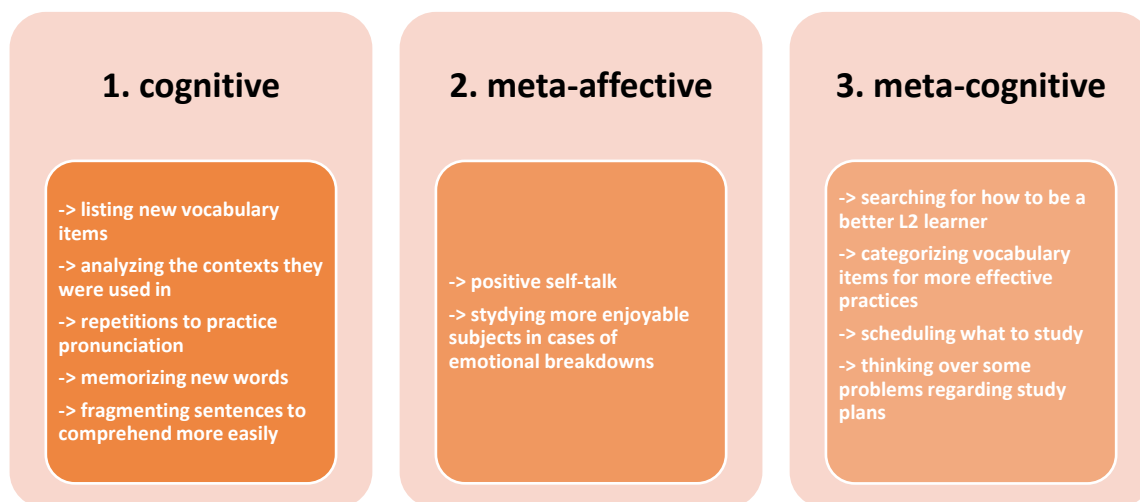
**Self-regulation via Social-interactive Strategies.** Using social interaction to learn L2 was practiced by Reha. He chose a friend who was studying at another university prep class and at a more advanced level than him. They used online chat. Although it was not conducted orally but in written format, it still provided a chance to practice his communication skills:

A friend of mine is studying English at another university, Marmara University. He is at a more advanced level than me. At the beginning of the semester, we sometimes said that "Let's speak in English on WhatsApp". We were choosing a topic and we were talking in English. (Reha, First interview)

Unlike Reha, Esra did not prefer social interaction in the L2 learning process, which may be attributed to her low proficiency level to be able to communicate in L2 confidently. The fact that Reha preferred a friend rather than a total stranger and utilized written format but not spontaneous oral communication can be related to the fact that he was also at a low proficiency level to feel comfortable in other circumstances and he was not pleased with his speaking skill.

**Figure 32**

*A Summary of Self-regulatory Strategy Use in No-DMC Group*



The summary of the self-regulatory strategy use in the No-DMC group can be viewed in the figure above.

## **The Role of Language Learning Effort in Different DMC Groups**

### ***Language Learning Effort in DMC Group***

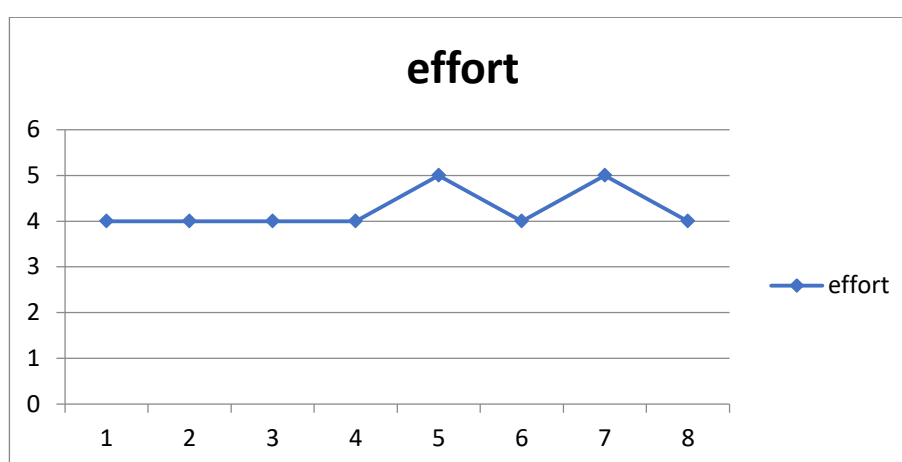
The language learning effort of the participants with different DMC experiences was another key concern to be investigated in the study and both quantitative and qualitative data were collected for a detailed analysis. Quantitative data were obtained using self-plotted motigraphs while qualitative data were collected via semi-structured interviews and language learning diaries.

Directed motivational currents refer to a prolonged period of an intense motivational process requiring a great amount of investment in terms of time and effort. While time is needed to complete each sub-goal leading to the desired end goal, effort is the key to pursuing the behavioral routines and progress checks. Despite the demanding nature of that exceptional experience, no significant fluctuations have been observed in Yunus and Ayşe's language learning effort.

**Yunus.** Investigating the pattern in Yunus's motigraph, it was seen that he had a great effort to learn L2 in the prep-class and his trajectory was quite stable. He scored only 4 and 5 in the graphic which were the top scores possible. That finding was totally in line with his emotional and motivational states which were presented to be high and quite steady in the previous sections.

**Figure 33**

*The Effort Pattern of Yunus*



A deep analysis of qualitative data revealed that Yunus had routines he followed every day and he spent nearly all of his time studying English. The excerpts below demonstrate the effort made by him in the current:

For example, I wanted to start with the grammar. I open the book and I study the subject. Then, I continue with writing. I learn some patterns on the internet to use in writing. After that, I choose a topic. Of course, I look at the topics on the internet and I start writing. I usually send these writings to my teachers. Even if I can't, I show them on weekdays. Then, for example, if I have to study listening that day, I continue with it. I constantly study like this. Finally, after studying all of them, I take a break for an hour, and then I start reading books again. So I never stop studying. (Yunus, First interview)

I am devoted to learning English right now. (Yunus, First interview).

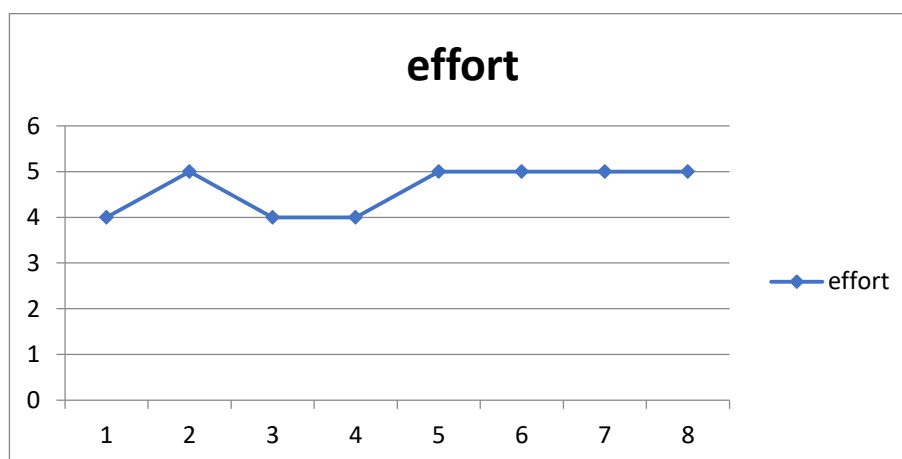
Despite the huge amount of effort made by Yunus to learn English, he still had the feeling that it would be much greater if he could increase it a little bit more. That desire was not the result of a feeling of inadequacy, but related to Yunus's perfectionist characteristic feature:

I think it would be better if I increased it a little bit. I cannot say that I am inadequate or very sufficient. The person who says enough is always lost because I think there is no limit to perfection. So, if I can be a bit more competent or if I can work a little more, it would be better for me. (Yunus, First interview)

**Ayşe.** The graphic displaying the effort pattern of Ayşe was nearly the same as Yunus's case. Ayşe chose the highest scores possible (mostly 5) to evaluate the effort she spent on learning English during the period. Her effort was in line with her motivational and affective states which were all high at the top scores.

**Figure 34**

*The Effort Pattern of Ayşe*



Qualitative findings supported significant engagement of Ayşe in learning English:

Every day I have to do something if it's two hours, three hours or four hours. Every day I have to. Otherwise, I feel like it's missing. (Ayşe, First interview)



In my pre-intermediate and intermediate I never missed any class. (Ayşe, Follow-up interview).

The analysis of qualitative data showed that Ayşe did not see her effort enough, though. She could not speak English all the time since she did not have someone to talk to after school, and in her opinion, that was a disadvantage for her on her journey to master L2. She was assuming that she should have been speaking only English to learn it much better. Contemplating on that issue, a few weeks later she found a native speaker to practice regularly after class hours and it was reflected in her graphic, too as she scored 5 for her effort in the last four weeks. The dialogue below clarifies her viewpoint:

I: Do you think that you put enough effort in learning English?

A: No

I: Okay, why not? Can you explain a little bit?

A: Yes, because for example when I am at home, I only speak Somali nothing else there is no one that I can speak English. Though I have a lot of cousins and a lot of friends who speak English, everyone is busy with their life or their own business. So...

I: But this is not because of you, this is not something you can control.

A: Yeah, this is not, but I don't know but I feel like I need to do it appropriately.

I: Okay, so do you think that you need to increase your effort?

A: Yes, for example, if I have someone, if I get someone who speaks English well like a native, someone who gives me his or her time I don't know, it will be okay.

(Ayşe, First interview)

I met a friend who is a native speaker so I practice my English with him every day.

That's what makes me happy. (Ayşe, Follow-up interview)

To sum up, both the graphic representation and the detailed analysis of qualitative data disclosed that Yunus and Ayşe had a consistent language learning effort trajectory with no significant breakdowns in the intensity of it, which was an anticipated finding in line with the arduous nature of the DMC experience.

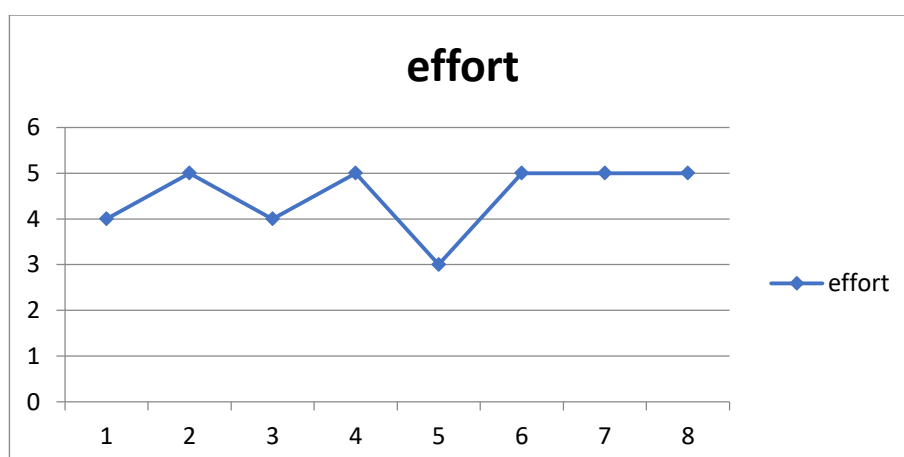
### ***Language Learning Effort in DMC-like Group***

Investigating the effort patterns in DMC-like cases, it was seen that all of them had mainly a great effort to learn L2 in the prep class. However, some slight breakdowns have been observed in their trajectories, which would support their being in the partial DMC group rather than the full DMC one.

**Hakan.** A detailed analysis of Hakan's trajectory revealed that he pursued his effort throughout the 8 weeks, mostly scoring 4 and 5 to reflect on it. Despite his occasional ups and downs in his motivational and affective states, the graphic representation of his effort was quite stable.

**Figure 35**

*The Effort Pattern of Hakan*



Hakan acknowledged his persistence during the interviews and diaries as well. He explained that he focused on English for that year and he studied hard:

I: How much effort do you think you put into learning English?

H: In the previous years, it was very little, but this year I think I put a lot of effort because I do a lot of things, there is only one lesson, English preparation. Of course, it has a lot of branches, but I think I put a lot of effort into it. (Hakan, First interview)

However, Hakan did not deny his reluctance about studying grammar. He stated that although he liked English a lot, grammar was so dull for him that he would spend minimum time and effort on it:

I study grammar just enough but not more. However, for other skills, I enjoy studying. For example, while reading something I underline the words, try to use them in the sentences, and then read the whole text again. I never do such things in grammar though. I go over it a couple of times in grammar and finish it. (Hakan, First interview)

Lastly, the minor decrease in his graphic during week 5 was investigated deeply; however, the language learning diary belonging to that week did not include any explanation or cue for that. When asked about that change in the follow-up interview, unfortunately, he could not recall as well. Thus, a reasonable account cannot be provided to shed more light on that pattern. It should be cautioned at this point that self-plotted motigraphs may not always offer completely reliable results, but only the participants' perceptions or insights at the moment of marking are reflected.

**Faruk.** The motigraph and qualitative investigation of Faruk's effort state revealed that he exerted strong effort to master L2. He thinks that it could be increased more since he aims at perfection but his effort cannot be underestimated. Similar to Hakan, he scored mostly 4 and 5 to reflect on it.

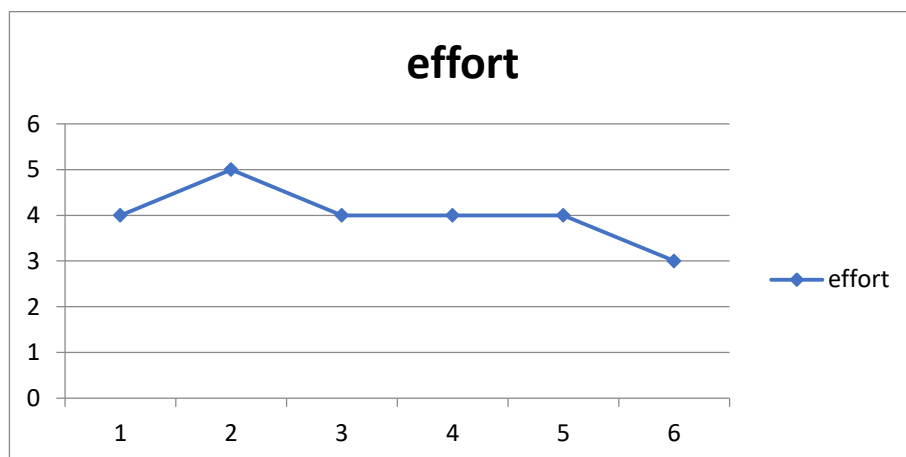
I: How much effort do you think you put into learning English?

F: I think I've put in enough effort, but if you ask me if it could be better, it is always possible to do much better. But, for now, I think it is enough. (Faruk, First interview)

However, during week 6 he has a little fluctuation (falling from 4 to 3) due to some personal issues. The last two weeks cannot be observed in the graphic above since he did not submit data for these two weeks. Since he had significant family and relationship problems in his private life during these weeks, which was explained in the previous section, he could not focus on anything including the current research study and did not complete the language learning diary and motigraph belonging to these weeks. Though he provided data for these two weeks later on during the follow-up interview, it would not be reliable to ask him to complete the motigraph retrospectively referring to these weeks.

**Figure 36**

*The Effort Pattern of Faruk*



Faruk explained that he was sometimes feeling overwhelmed in the intense prep-school year. He was not able to feel like an undergraduate student but he was more like a high-schooler going to school and studying lessons all the time. In line with these feelings, the cumulative tiredness of the period was also responsible for the decrease in his graphic

for the last weeks. However, he still did his best to overcome these obstacles and returned to his previous study practices before the end-of-course test:

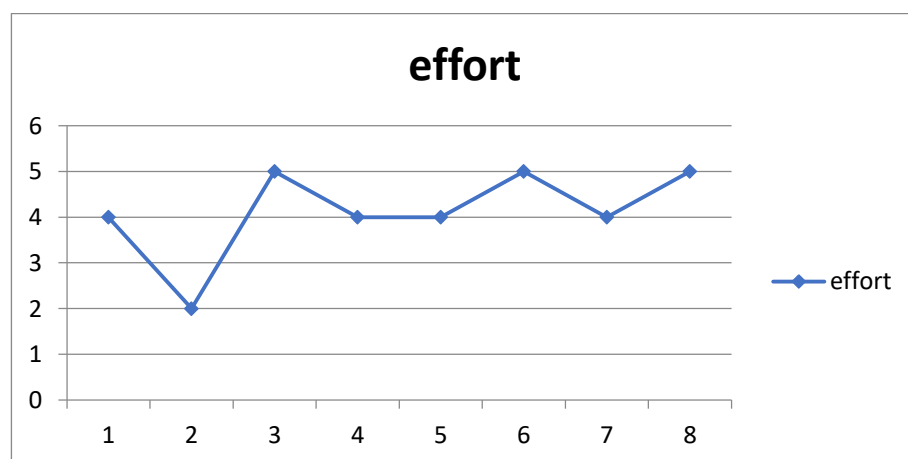
Our schedule seems really intense to me, five days and five hours every day. I feel like I'm still in high school. I still don't feel like a college student. Also, I haven't seen my family for two months and missed them. When everything hit me like this, there was a bit of a collapse, but I saved what I could save again before the end-of-course test. (Faruk, Follow-up interview)

**Peri.** Findings put forward that Peri exerted great effort to master English during the prep year. She reported studying hard every day without leaving her routines. Even if she could not do so due to various reasons, she compensated for the missing time and effort as soon as possible. Her effort was in line with her motivational state, affective state, and success as well:

During this module, I did daily revisions. Besides the things teachers told us in classes, I tried to add new information and skills to them after school. I attended additional self-access-center activities after school voluntarily. My effort and success were in line with each other. (Peri, Follow-up interview)

**Figure 37**

*The Effort Pattern of Peri*



According to the graph depicting Peri's effort trajectory, she fluctuated significantly only in week 2 due to quiz stress and anxiety, which was in line with the fluctuation in her emotional state represented in her motigraph beforehand. She tried to relax and overcome it later on with some activities such as shopping. The data for week 3 displays that her relaxation method worked perfectly and she could increase her effort to 5 again.

Despite her vast amount of persistence in following pre-determined routines to her valued end goals, her effort was not enough for Peri. Similar to the other DMC-like cases, Hakan and Faruk, and the DMC cases, Yunus and Ayşe, Peri also found her effort insufficient:

I: Why did you choose 3 for your effort but not 5 or 0?

P: As I said, I don't study English day and night. I spend 2 or 3 hours every day after school. So I don't think I put too much effort into it. I do not go to an extra study center, I participate in self-access-center activities as much as I can. However, for example, some people participate in them more than I do. These are the reasons. (Peri, Follow-up interview)

It can be asserted that being in a fully-fledged DMC state or carrying the core features of it partially are similar to each other in that they are both experienced by perfectionist people by nature or they bring about perfectionism the cases strive for to reach their valued end goals.

To sum up, both the graphic representations and comprehensive investigation of qualitative data revealed that Hakan, Faruk, and Peri put significant effort into the intense learning process. However, little breakdowns were observed in their data due to various reasons such as feeling bored while studying grammar, having some problems in private life, and feeling anxious and stressed due to exams. It was observed that Hakan's effort trajectory was not much influenced by his motivational or emotional ups and downs while Faruk and Peri reported slight negative impacts of their emotional states on their effort.

Finally, despite the great effort exerted by three participants, all of them commented that it was insufficient and it was always possible to increase it for more effective learning.

***Language Learning Effort in the Cases Starting in DMC-like and Ending up in No-DMC Group***

Following the elaborate inspections of Oya's and Melis's partial DMC characteristics, strong fluctuations and self-regulated strategy uses, the results obtained from the qualitative data and motigraphs regarding their effort states will be reported in this section. Distinctive effort trajectories were revealed for the two cases of that newly-emerging group, which are unveiled below.

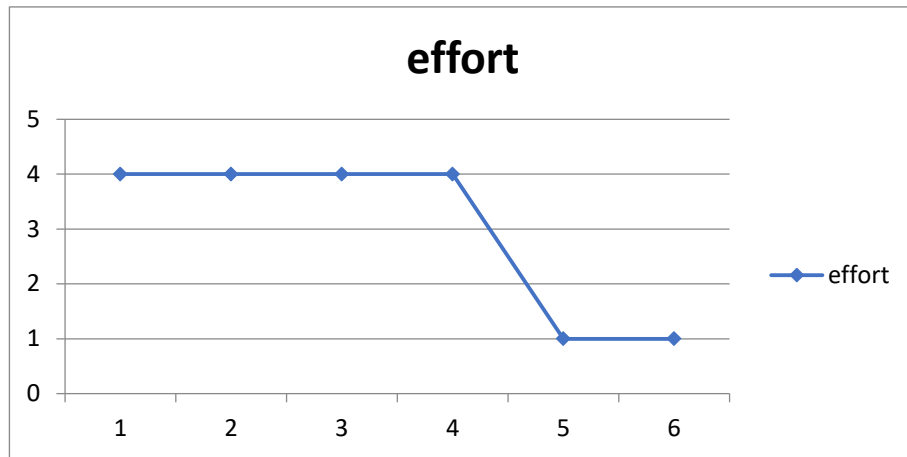
**Oya.** From the data in Figure 38, it is apparent that Oya started the period with great engagement, though not perfect. However, she always believed that it was not sufficient and should be increased:

My motivation is always 5. My effort right now... My effort should be 4, not 5 because my effort is a little bit less. But I am planning to increase it. (Oya, First interview)

Oya's commitment to the L2 learning process was observed to be mainly in line with her motivational and emotional states. What stands out in the figure below is the rapid decrease in her effort trajectory when she started to worry about the upcoming proficiency exam and lost her motivational intensity. The feelings of panic and anxiety resulted in great falls in this domain as well in line with her motivational and emotional states.

**Figure 38**

*The Effort Pattern of Oya*



Oya reported during the follow-up interview, which was conducted after the proficiency exam, that she had failed the test, which was predictable considering her falling trajectory and felt extremely disappointed and resentful for some time. After recovering from these destructive emotions, she tried hard to return to her previous commitment level and start again during the next module:

I: Were you able to return to your previous states in terms of your motivation, effort, and emotions?

Mo: Yes, of course. This is not something that stops me because I have big patience, and a big desire; still, I want to achieve things. Well, I face many problems; I will face many others in the future. So, if I give up on such things, I shouldn't have a big desire at all. I still love the English language. Things that I want to do in the future are related to this language. That is why I love this language. (Oya, Follow-up interview)

Although the next module was not included in the scope of this research study, it is noteworthy to mention here that although she completed the previous module with No-DMC characteristics, she endeavored to start the new one with her previous DMC-like features again to reach her goals. She also seemed to have refreshed her emotions and started to talk about her great love to learn English again. Thus, it can be speculated that



experiencing the intense motivational current even to some extent during that process functioned as fuel for her upcoming efforts and gave her the power to start over.

**Melis.** The effort pattern Melis created upon her self-plotted data represented a dynamic trajectory. Unlike Oya, Melis did not experience one dramatic fall but she went through a few ups and downs throughout the module. She started the period with high levels of effort, motivational and affective states. However, similar to the other cases of this study reported so far, Melis also did not find her effort and commitment sufficient:

I: How much effort do you think you put into learning English?

Me: I believe that I am giving 60 or 70 percent of myself right now. It is actually high, but I think it is not enough and should go up to 90 percent. (Melis, First interview).

She also compared herself to a classmate, Yunus in the DMC group, and seeing that she did not spend all of her time studying English just like Yunus did, found her own effort inadequate and wished to increase it:

Me: I have a classmate named Yunus. If I study like him, then I can choose 5. But I am not studying as much as he does. He spends his whole life studying English, day and night. Maybe I feel insufficient because I see him.

I: So it's like a comparison?

Me: Yes, I am comparing, because I am the second one and he is the first one in class in terms of our grades. He studies English every minute. He doesn't do any social activities at all. (Melis, First interview).

As shown in Figure 39 below, a rapid decrease was observed in Melis's effort during week 3 due to a health problem in her family:

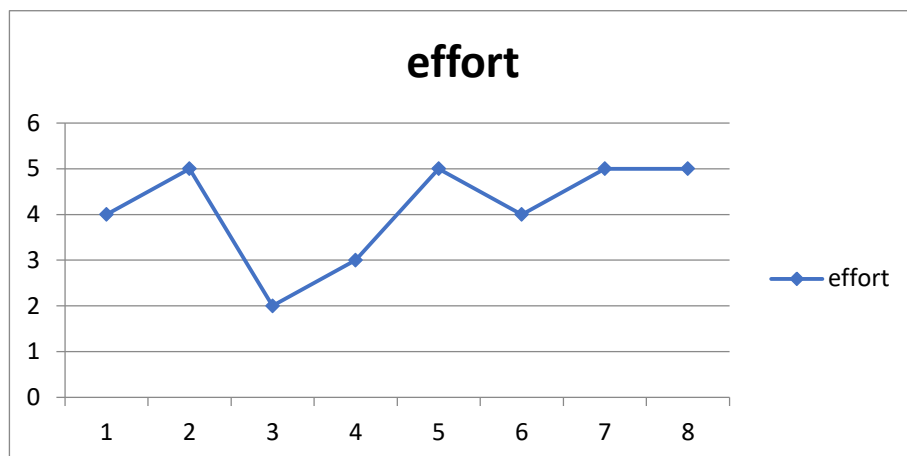
My mother had to have surgery for a minor problem. She couldn't get up for three or four days after that. That's why I had to take care of my house and my mother.

At that time, I was studying mostly at night for a couple of hours. However, I realized that although I spent time studying, I could not do it effectively. I lost motivation when there were situations like this at home, but then I could overcome it to some extent. (Melis, Follow-up interview)

Since her mother had surgery, she had to take care of her and also the house chores. Due to these facts, she could not spend enough time on English. Even though she endeavored to pursue her routines to some extent, they were not fruitful at all.

**Figure 39**

*The Effort Pattern of Melis*



Following the recovery of her mother, Melis could partially increase her effort and keep up with the subjects she had missed. Finally, during weeks 7 and 8 she returned to her previous potential and devoted herself to English as much as possible since the end-of-course test was coming soon and she wanted to move on to the next module. Thus, she stated that she put enough effort during these two weeks:

My effort was enough during the last two weeks, but before that, it wasn't enough.

B1 is a milestone in the language learning process. You learn a lot of new words

during B1. Grammar topics are getting harder, and if you don't study, you're missing out. That's why I had to study more. (Melis, Follow-up interview)

In summary, these results show that both Oya and Melis exerted significant effort to learn L2 until they faced obstacles with adverse emotional and affective results. Feeling panicked and confused after seeing a sample proficiency test, experiencing some health issues in the family, and not feeling comfortable in the new class environment caused dramatic changes in their DMC-like experiences dragging them into No-DMC features. Even though Melis tried hard to keep her effort high after her mother's recovery, she still could not overcome the motivational and emotional challenges of being with people she had no emotional commitment.

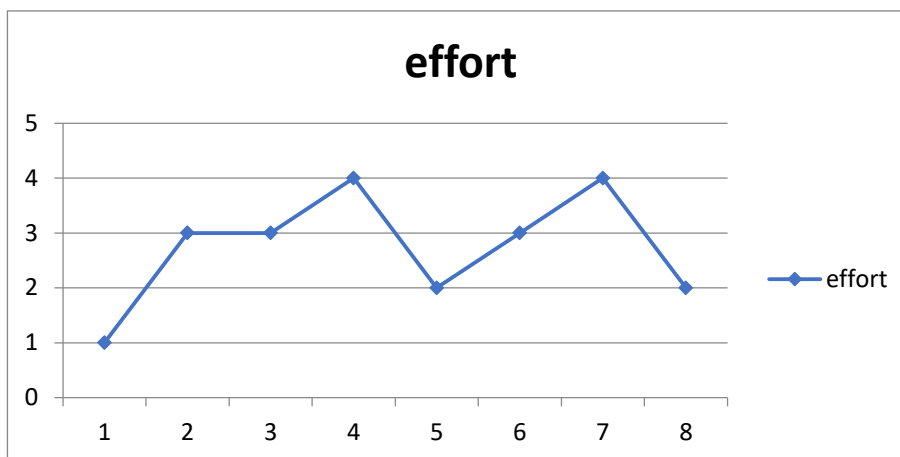
### ***Language Learning Effort in No-DMC Group***

Language learning effort is defined as one of the key components of a fully-fledged DMC experience leading the learners to their desired end goals. Lacking a clear end goal, No-DMC cases in this study appeared to have great fluctuations in their effort states.

**Esra.** Investigating the pattern in Esra's motigraph, it was clearly seen that she had a moderate level of exertion to learn L2 in the prep class and her trajectory was unstable. She scored from 1 to 4 in the graphic. That finding was partially in line with her emotional and motivational states: while she had greater breakdowns in these domains, she seems to have fewer instabilities in her effort state, which can probably be attributed to the fact that she was a good student with a sense of responsibility. Thus, she may have pursued her effort even in the cases she felt demotivated.

### **Figure 40**

*The Effort Pattern of Esra*



Interview data revealed that though she chose positive scores representing her effort, she expressed that her effort was not enough. In fact, that was the case for all participants in this study. They were all aware of the fact that prep year requires a total investment of effort and energy to be able to learn L2 proficiently, but they mostly complained about lacking that effort and energy. Investigating Esra's case more deeply, she also explained that her effort was not enough. Though, unlike the others; she thought that it was not due to her lack of commitment, but she could get by at the elementary level with that amount of effort since subjects were not much new and complicated for her:

I: How much effort do you think you put into L2 learning?

E: I don't think I put enough effort hocam. For example, my friends at the pre-intermediate level are not like me, they work harder. I think that I will also study much more regularly when I pass pre-intermediate, but now we are more relaxed in the elementary class. We are familiar with most of the subjects from our high school years or so. I think I can only improve myself in speaking or vocabulary right now. I can't spend too much effort even if I want to, you know, after a certain time, the things to study are over for me. (Esra, First interview)

While the extract above reflected Esra's reasoning for exerting a low amount of effort into L2 at the beginning of the module, a few weeks later, during week 5 she confessed that she was wrong. Making a slight effort just because she was at the

elementary level was not a good idea in the language learning process, which was demonstrated by her low grades as well:

My motivation was decreased due to the low grades I had in quizzes. I realized that I needed to study harder. (Esra, Language learning diary, week 5)

**Reha.** Reha acknowledged that this year he invested significant effort into learning English. Considering that he had no other courses to study, he asserted studying well for it. Nevertheless, he expressed that his exertion was not enough:

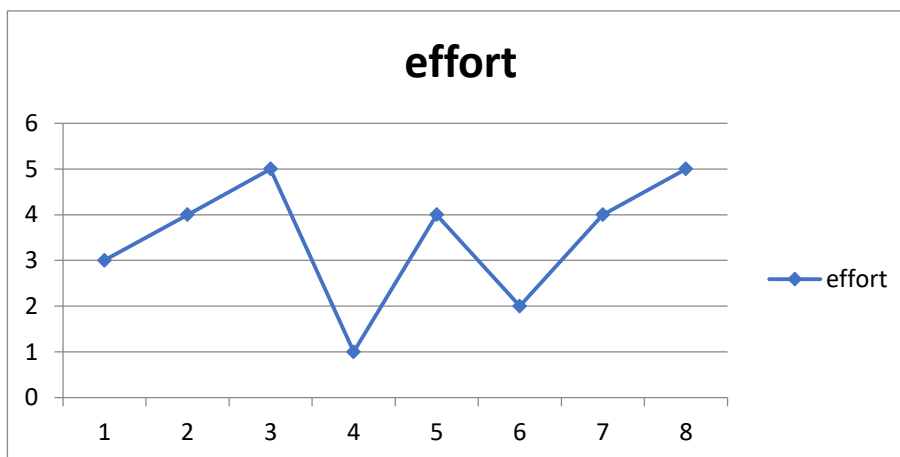
I: How much effort do you think you put into learning English?

R: Considering my whole life, my effort is good right now. I think about my relationship with English so far... almost none. I dealt with it only in exams and that was all. Now I go home and study English. I have never done such a thing in my life, but now I do. I feel that I spend a good effort but still not enough. Sometimes, I think that I can do more than that. (Reha, First interview)

The self-plotted motigraph data displayed that Reha's effort trajectory was still not robust all the time, fluctuating between 1 and 5. He experienced ups and downs due to affective and motivational reasons which had adverse influences on his effort as well, which can be observed in Figure 41 below:

#### **Figure 41**

*The Effort Pattern of Reha*



Motigraph data suggested that Reha's effort state was in line with his motivation and emotions, but a little higher than them. Especially during the last two weeks, a great increase was observed in his commitment to language learning. The upcoming end-of-course test seems to be the triggering factor for that.

Despite great ebbs and flows in the graphic, Reha never completely deserted his studies even when his motivational and emotional states were decreased to zero or even minus scores. Similar to Esra, Reha also tried to pursue his exertion to some extent even under great despair and anxiety. He appeared to follow at least some routines such as working on the next pages of the book to be covered in the following lessons:

R: Even when I don't want to do anything, I just open the book and find the meanings of the words that I don't know on the pages to be covered the next day.

I: Do you always do this, for example, is it a daily routine for you?

R: Yes, kind of. I do that most of the time. (Reha, First interview)

Both the graphic representations and comprehensive investigation of qualitative data revealed that Esra and Reha experienced significant instabilities in their exertion trajectories. They also confessed that they lacked a sufficient amount of effort due to the negative impacts of their motivational and emotional states on it. Yet, being aware of their responsibilities, they could accomplish keeping their effort states slightly greater than the others not to get completely off track in their prep-class education.

To sum up, findings validated the dynamic nature of DMC construct strongly influenced by ID characteristics. While ideal L2 self and vision appeared to have strong total effects on DMC, self-regulated strategy use and language learning effort had the largest direct effects on it without any mediating variables. Findings also shed new light on conscious self-regulatory strategy use during the intense current due to the emotionally, physically, and mentally demanding nature of it. The use of mainly meta-strategies by pure DMC cases provided evidence for the existence of these challenges. Lastly, language learning effort appeared to follow a dynamic pattern in line with the affective and motivational states of the learners. Thus, regulating the emotions and motivational intensity could strengthen the learners' efforts. The next chapter of the study is devoted to the discussion of these findings in the light of the L2 motivation and DMC literature.

## Chapter 5

### Discussion and Implications of the Study

This chapter starts with a summary of the current study. Then, following the order of the research questions, first quantitative findings and then qualitative ones are discussed in light of the literature and in relation to each other. Lastly, pedagogical and methodological implications are presented. It should be cautioned that since the aforementioned ID factors (self-regulated strategy use, L2 learning effort, ideal L2 self, and imaginary capacity) were not investigated sufficiently in relation to DMC thus far, previous studies about L2 motivation will also be referred to. The abundance of studies in this field will also create rich content for the discussion section.

#### Summary of the Study

This study investigated the structural interactions among DMC dispositions and ID characteristics of tertiary-level EFL learners in the Turkish higher education context. Initially, in the quantitative stage, participants' levels of DMC dispositions and the other ID factors, namely self-regulated strategy use, language learning effort, ideal L2 self, and imaginary capacity, were analyzed descriptively via SPSS Statistics. Then, the correlations and structural interactions between them were sought. The qualitative stage continued with further investigation of the quantitative findings. First, identifying the characteristics of the cases with a fully-fledged DMC experience, DMC resembling experience, moving from DMC-like to no DMC experience, and completely no DMC experience was targeted. After that, self-regulated strategy use patterns of different DMC profiles were investigated. Finally, the language learning effort in the abovementioned four DMC groups was analyzed deeply from a dynamic perspective. With these stages conducted throughout the study, disclosing the ID factors impacting the long-term sustainment and strength of DMC was intended. In addition, by examining the role of



individual differences in DMC experiences, revealing the dynamicity of the construct in relation to personal variability was targeted.

This study employed a mixed-method sequential explanatory research design. The participants were tertiary-level EFL learners at the Social Sciences University of Ankara, School of Foreign Languages. Quantitative data were collected from 305 participants via a composite instrument of DMC dispositions, self-regulated strategy use, language learning effort, imagery capacity/vision, and ideal L2 self. Qualitative data were collected through first and follow-up interviews, learning diaries submitted by the participants bi-weekly, and motigraphs representing the participants' motivational, affective, and effort states each week. 9 cases chosen via retrodictive qualitative modeling (RQM) took part in the qualitative stage.

Quantitative findings revealed that participants had high levels of ideal L2 self and imaginary capacity. At the same time, they scored moderately in terms of their DMC dispositions, self-regulated strategy use, and exerted effort in L2 learning. Interestingly, DMC appeared not to be a rare phenomenon. Then, correlation and path analysis displayed strong interactions between DMC and the related ID factors. To summarize, self-regulated strategy use and language learning effort of L2 learners directly and strongly predicted their DMC experiences, which means high levels of strategy use and commitment to L2 learning would lead to high DMC disposition scores. While the ideal L2 self exerted an indirect effect on DMC, the imaginary capacity of L2 learners exerted both direct and indirect effects on it functioning at the center of the relationship network.

In the qualitative analysis stage, first, the key characteristics of the participants in different DMC groups were explored, and then the ID factors revealed by quantitative data to have a substantial direct impact on DMC, self-regulated strategy use, and language learning effort, were investigated further. Two cases were identified with a fully-fledged DMC state: Ayşe and Yunus. Partial DMC cases, Hakan, Peri, and Faruk, also appeared to represent the core features of DMC; however, they experienced slight fluctuations in

their affective states, which impacted upon the smooth functioning of the other hallmarks and justified the decision to categorize them in that group. During the qualitative data analysis stage, another learner group that includes the cases, Oya and Melis, starting in the DMC-like group and ending up in the No-DMC group emerged with distinct characteristics from the others. They had distinctive key characteristics of DMC-like learners at the beginning of the 8-week period; however, they completed the period with strong deviations and finally fell into the No-DMC group. Lastly, two cases, Esra and Reha, were categorized in the No-DMC group since they neither had intense motivation nor carried core features of DMC. Both of them were greatly affected by the momentary changes, such as a low grade on a quiz, a temporary feeling of inadequacy, or a failure in an activity. Then, they both needed long time to be able to recover affectively and compensate for their losses, which were not observed in DMC or partial DMC cases.

Investigating the participants' language learning journeys throughout the 8-week period more closely, meta-affective and meta-cognitive strategy use was observed by pure DMC cases in the data. They seemed to utilize these strategies to regulate their emotions and overcome the difficulties of the current. A significant amount of engagement in the learning process was also identified. On the other hand, participants in the DMC-like group, starting in DMC-like and ending in the No-DMC group and purely No-DMC group appeared to prefer cognitive strategy use in the very first place. The rationale behind that preference was vocabulary learning and practicing via noting down new words, using them in contexts, listing them, fragmenting them, and repeating them. Similar to DMC cases, DMC-like cases, Hakan, Peri, and Faruk, who experienced slight fluctuations in their trajectories due to classroom environment, exam anxiety, or personal issues preferred meta-cognitive and meta-affective strategies in the second and third places to overcome the challenges of the current and keep it until attaining their goals. Language learning effort in these groups was mostly in line with their motivational and affective states; however, increases were observed through the end of the module due to the end-

of-course tests coming closer. Finally, it was interesting to see that all cases in the study stated a lack of effort to learn L2 in their journey, and they strongly desired to increase their commitment to that process.

### **Discussion of the Results**

This section discusses findings in relation to the current literature following the order of the research questions. Since the second and third questions build upon each other in terms of the data they provided, they are handled together.

The first research question (see Research Questions, page 5) aimed to reveal the levels of DMC dispositions, self-regulated strategy use, L2 learning effort, ideal L2 self, and imagination capacity of tertiary-level EFL learners at a state university in Ankara. Findings showed that they had high levels of ideal L2 self and imaginary capacity while they scored moderately in terms of their DMC dispositions, self-regulated strategy use, and exerted effort in L2 learning.

Considering that the participants were tertiary-level adult learners, it is entirely rational that L2 learning is a significant part of their ideal self. Since they have completed the transformations of adolescence and created their selves as mature individuals, they are at the developmental stage to make much more sound and realistic decisions about themselves and create their wishes (Carlson, 1965). Ryan (2009) states that university students learn English out of their own free will and decision-making. Although this study was conducted in a compulsory prep-class education context, the learners could still make their own choices whether to complete the year with high L2 proficiency or just with the minimum passing grade. Thus, creating L2 specific goals for their future lives with a robust vision of it can still be suggested to derive from their own free will. Therefore, the ages and developmental levels of the learners may be asserted to have large impact on their high ideal L2 self. The study by Öz (2015) supports the findings regarding the high ideal L2 self of tertiary-level EFL learners in Turkey. A noticeably high level of vision of tertiary-

level EFL learners was also a core finding. Based on the significant correlation between vision and ideal L2 self, that outcome can be associated with the participants' high ideal L2 self levels. Dörnyei and Chan (2013) described vision as the individual illustrations of future goal states. It may be asserted that the goal that needs to be attained in the future is the ideal L2 self, and a clear vision of the ideal L2 self leads to motivated learning behavior (William, Mercer, & Ryan, 2015).

As a result of the descriptive analyses, DMC appeared not to be a rare phenomenon experienced by a minority. However, their frequency was at a moderate level, more than expected. Muir (2020) also reached similar results and explained that "DMC is a well-recognized and even a (relatively) commonly experienced motivational phenomenon" (p. 189). In her study, %36.5 of the participants stated having experienced the intense current once or twice. Although the context in Muir (2020) was not restricted to language learning in an institution, the prevalence of familiarity with the concept is promising. Gümüş and Başöz (2021) reached supporting results showing that 20.8% of their participants reported having experienced the intense current once or several times on various occasions. The rate of experiencing DMC while learning English at a university was even higher, 24%, in their study conducted in a tertiary-level EFL context in Turkey. Thus, the finding representing a moderate level of familiarity with DMC experience in this study is encouraging in that considering the demanding nature of language learning in prep schools, experiences of DMC can assist learners in reaching the commitment level they need.

The results indicated that language learning strategy use at this prep school was at a moderate level, which is in line with Alhaisoni (2012) and Al-Otaibi (2004) who revealed similar ones in the Saudi Arabia context. A close investigation of both quantitative and qualitative findings revealed that cognitive strategies were the most frequently utilized ones followed by meta-affective and meta-cognitive interventions. Oxford (1990) suggested that cognitive strategies are popular because they are directly related to

language input. Watching movies in L2, and studying grammar or vocabulary were the examples suggested by her as direct language information to be studied. In this study, cognitive strategies were commonly preferred to improve vocabulary learning. Since the prep-school education provided at this English-medium university was a demanding and high-quality one, students were aware of the fact that they needed to learn enough vocabulary to be able to improve themselves in other skills, which has been expressed by Nation (2011) as well. Therefore, vocabulary learning was a significant requirement for them and they mostly focused on that aspect of language using strategies such as writing down new items, using them in contexts, listing them, fragmenting them, repeating and memorizing them, and so on, which all refer to direct interaction with the language itself.

It was revealed that participants favored meta-affective strategy use in the second place. Habok and Magyar (2018) suggested that strategy use was highly related to age, personality, and educational background. For example, participants in older age groups utilized meta-affective strategies more than young learners, which can be attributed to their cognitive abilities to evaluate their emotions and take action about them. Since young adults were the participant group of this study, they have reached the cognitive development to analyze their affective states and regulate them in the learning process.

Thirdly, meta-cognitive strategies were preferred by the participants to organize the learning processes or overcome some challenges experienced while learning L2. The participants had clear goals of completing their prep-school year successfully and moving on to their departmental studies. Thus, managing and organizing their learning was a necessity for them, which is supported by Alhaisoni (2012). Finally, social-interactive and meta-social-interactive strategies were the least favorite ones, which may be attributed to the fact that the participants were in an EFL setting where they did not need English for daily communicative use as in ESL contexts.

The first research question also sought to determine the L2 learning effort levels of the participants. According to the results, participants seemed to exert a moderate level of

effort to learn L2. As explained above, since the study was conducted at an English medium university, prep-school education is challenging regarding its requirements and passing grades. Students are expected to take several quizzes or exams and complete plenty of tasks to reach the minimum grade to take the proficiency exam at the end of the term. They are informed about these requirements and procedures at the beginning of the term during the orientation week. Thus, it may be speculated that they are aware that they cannot pass without putting any effort into language this year. However, qualitative data and motigraphs also revealed supporting data that participants tended to understate the amount of effort they spend on L2, considering that they could always do more. Hence, the moderate level of effort reported by them is pretty sensible. In addition, based on the correlations between L2 learning effort and self-regulation and DMC and L2 learning effort, this finding was entirely predictable. A reciprocal interaction between self-regulatory strategy use and L2 learning effort was identified in the literature suggesting that while learning effort activates self-regulation (Kormos & Csizer, 2014), strategies guide the learners' effort to be canalized in the right direction (Zimmerman, 1989). Finally, a moderate level of DMC experience may support the participants' moderate engagement in the learning process. To clarify, DMC was introduced to the L2 motivation field to explain the long-term effort sustained until the end goal. Muir (2020) states that "DMC offers a very real advance with regards to our understanding of long-term motivational processes and prolonged engagement in language learning" (p. 202). Discussion of their strong correlation in the following section may also provide a more detailed understanding of their relationship.

Later in this section, the second and the third research questions (see Research Questions, page 5) are discussed together since they complete each other in terms of the data they provided. The most evident finding to emerge from the path analysis is the predictive relationship between language learning effort and DMC. Gardner (2001) stated that the motivation to learn a language requires taking action to successfully realize that

goal, and the action stage corresponds to the effort put into the process. Thus, it can be asserted that foreign language learning effort is "composed of motivated acts geared towards learning a nonnative language" (Karabıyık & Mirici, 2018, p. 374). Dörnyei and Otto (1998) also provide support for that interaction defining L2 motivation through the amount of conscious effort to reach the desired goal, thus emphasizing the role of effort in goal attainment. Finally, Muir (2020) explains that DMC helps us understand the long-term sustainment of engagement and motivational intensity. In addition, language learning efforts indirectly affected DMC via the mediation of self-regulated strategy use. Learning effort is considered the overlapping point of self-regulatory and motivational constructs since it is an essential term in both (Kormos & Csizer, 2014). Effort as a motivated action activates the self-regulated strategy use of the learners (Kormos & Csizer, 2014) and ultimately causes autonomous learning. Reciprocally, self-regulated strategies guide the learners' effort to act successfully in the learning process (Zimmerman, 1989). Exerting effort into the learning process and sustaining it even in the cases of challenges are presented by many researchers among the characteristics of good self-regulators (Boekaerts, Pintrich, & Zeidner, 2000; Zimmerman, 1998; Zimmerman & Schunk, 2001).

The direct relationship between imagination capacity/vision and DMC is indisputably apparent in the literature. DMC is a construct significantly based on goal/vision-orientedness (Muir & Dörnyei, 2013). Muir and Dörnyei (2013) highlight the role of vision in the DMC experience as one of its primary components creating the current and causing the long-term sustainment of it until reaching the desired goal. Having a highly valued end goal and creating a solid vision of it in mind are among the essential characteristics of DMC experiences. In addition, Dörnyei, İbrahim, and Muir (2015) define DMC experience stating that DMC "can be seen as vision-led self-regulation along a fitting, made-to-measure pathway that augments and sustains exerted effort" (p. 103). This finding is contrary to some previous studies suggesting that a learner could experience DMC without creating a vision of the goal (Başöz & Gümüş, 2022; Henry et al.,

2015; Ibrahim & Al-Hoorie, 2019; Jahedizadeh & Al-Hoorie, 2021; Sak & Gürbüz, 2022). Thus, further investigation of the prerequisite role of vision in the intense motivational current is needed.

Another important finding was that the ideal L2 self had a direct influence on the self-regulated strategy use by the learners. In addition to a mediated interaction between ideal L2 self and self-regulated strategy use via learning effort, the direct interaction between them seems to be consistent with earlier research (Csizer & Kormos, 2009; Dörnyei & Ushioda, 2009; Iwaniec, 2014). To clarify, Csizer and Dörnyei (2009) stated that since the ideal L2 self has intrinsic values on the part of the learners, it prompts the learners to put effort into self-regulation processes. Similarly, Iwaniec (2014) looked into the predictive power of three self-constructs, self-efficacy, ideal L2 self, and self-concept, on self-regulated strategy use and revealed that ideal L2 self had the strongest effect on self-regulation while the others would impact upon the strength of ideal L2 self.

The results showing interactions among imagination capacity, ideal L2 self, L2 learning effort, and finally, DMC corroborate the findings of a great deal of the previous work (Dörnyei & Chan, 2013; Dörnyei & Kubanyiova, 2014; Kormos & Csizer, 2014; Murray, 2013). It is suggested in several studies in the literature that the capacity for mental imagery was a precursor for creating a vivid vision of the ideal L2 self (Al-Shehri, 2009; Dörnyei & Chan, 2013; Kim, 2009; Kim & Kim, 2011, 2014; Yang & Kim, 2011). Learners with strong imagination capacity would be able to create clearer visions of their desired future selves. The significant role of vision in stimulating learning efforts has also been supported by various researchers (Dörnyei & Kubanyiova, 2014; Muir & Dörnyei, 2013). Muir and Dörnyei (2013) displayed that with the positive emotions resulting from strong images of desired selves, the learners would tend to put tremendous effort into verifying them in their real lives. Thus, in accordance with the previous studies as well, learners with strong ideal L2 self would put a greater amount of effort into the learning process since it would not be sensible to wish to reach it without any intentional learning



effort (Kormos & Csizer, 2014), finally leading to stronger motivation. Impacting upon the ideal L2 self and language learning effort, vision could be speculated to be influential in self-regulation via their mediating roles.

Findings revealed a direct relationship between self-regulated strategy use and DMC showing that self-regulation would predict DMC experience. In line with this finding, Vidal-Abarca, Mana, and Gil (2010) suggest a direct interaction between self-regulated strategy use and L2 motivation, emphasizing that self-regulation effectively increases students' motivation. Bembenuity (2011) also agrees with their findings stating that self-regulation enhances learners' motivation. On the other side, no quantitative evidence was detected presenting a predictive power of DMC on self-regulated strategy use. To clarify, although self-regulated learners tend to experience DMC, being in that current does not entail using self-regulation strategies, which is a contradictory issue according to the qualitative data obtained in this study and the contemporary literature. Qualitative findings of this study revealed that Ayşe and Yunus, two DMC cases of the study, utilized meta-affective, meta-cognitive, and cognitive language learning strategies for different reasons, which was against the findings of earlier studies on DMC. Early literature on DMC suggests that DMC does not require conscious control of the behavior through self-regulatory strategy use because the individual caught up in that current does not see any obstacles to overcome during the process (Dörnyei et al., 2014; Muir & Dörnyei, 2013). DMC is defined as a voluntary automatic process that both produces and uses the energy needed to function (Dörnyei et al., 2014; Muir & Dörnyei, 2013), and Dörnyei et al. (2016) stated that self-regulation cannot explain the goal striving in DMC-like constructs. However, in a recent study, it has been suggested by Başöz and Gümüş (2022) that this does always not appear to be the case. They discovered that one participant with DMC experience utilized volitional control to create behavioral routines at the beginning of her experience. A note of caution is due here since how the initial volitional control in their study was pursued in the following stages was not clarified, though. More detailed

discussion regarding the strategy usage by pure DMC cases was provided in the following section and supported by various contemporary research studies (Başöz & Gümüş, 2022; Jahedizadeh et al., 2021; Pietluch, 2022; Sak & Gürbüz, 2022).

The fourth research question of this study (see Research Questions, page 5) initially sought to investigate the role of self-regulated strategy use and language learning effort in three DMC groups: pure DMC, DMC-like, and No-DMC groups. However, during the data analysis stage, a new group with diverging characteristics from the abovementioned ones appeared, which included two cases who started the period in the DMC-like group but unfortunately deserted the DMC resembling characteristics throughout their journey and ended up in a No-DMC state. The emergence of a new group via qualitative data supports the exploratory power of qualitative studies and confirms the right decision to employ the mixed-method research design in this study. Muir (2020) states that exploring DMC only via quantitative tools such as the DMC Disposition Scale would present limited and faulty data and hinder an exhaustive understanding of intense motivational experience in its context. Since DMC (and also *flow*) reflects a “complex psychological state” (Csikszentmihalyi, 1992; p. 183 as cited in Muir, 2020; p. 195) arising from the interaction of several personal, contextual, social, and cognitive processes, reduction of all these factors into a numerical result would not provide a comprehensive picture.

In the following parts of this section, three main titles, which are the validation of the structure of DMC and the other DMC-related groups, the role of self-regulated strategy use, and the role of language learning effort will be covered.

### ***Structure of DMC and the DMC-Related Groups in the Study***

Content analysis revealed two pure DMC participants, Yunus and Ayşe, in the current study. They were found to almost perfectly reflect the hallmarks, namely a clear starting point, goal/vision orientedness, a facilitative pathway, and positive emotionality.

This finding is consistent with that of Henry et al. (2015), Ibrahim (2016), Zarrinabadi and Tavakoli (2017), Safdari and Maftoon (2017), and Sak (2019) who conducted validation studies to investigate the presence of hallmarks in the learners' motivational experiences. Yunus and Ayşe, in this study, referred to the beginning of prep-school education as the starting point of their intense motivational state. As stated by Muir and Dörnyei (2013) and Dörnyei et al. (2014), successful initiation of DMC requires individual, contextual, and time factors to exist in harmony. In this prep school, a whole year is dedicated to language education, and qualified teachers and materials are provided to the students. In addition, after completing the prep class, they need to move on to their departments where they need to have competence in L2 to understand the courses taught in English, which can lead to the conclusion that optimum conditions for an intense motivational process were present. It can also be argued that a new setting where language education is the focus provided the learners with the impetus to encourage the launch of DMC to reach their valued L2-related goals (Sak, 2019). These results are consistent with data from Zarrinabadi and Khodarahmi (2021), suggesting that social-situational factors such as radical changes in life may trigger the initiation of DMC. Being a university student in another city and dedicating a year to language learning can be classified among these critical Peridents in their lives launching their experience. However, it should be cautioned here that while hundreds of students provided with the same learning opportunities and experiencing the same changes in their lives started the prep school education at this institution at the same time, they were not all immersed in the same intense motivational state, and the researcher could detect only two pure DMC cases. Although it is possible that some cases went unnoticed, this finding still supports the work of Muir (2020) stating that even in similar situations, a triggering factor may not function the same for everyone, or it may not lead to identical results every time. Thus, the presence of ideal personal, contextual, or social conditions does not ensure the emergence of a DMC for everyone.

Another critical component of DMC represented in the study was goal-orientation energizing DMC cases Yunus and Ayşe as well as partial DMC cases Hakan, Peri, and Faruk. Muir (2020) suggests that the core of DMC is rooted in the alignment between the learners' goals and self-concept. In addition, Csikszentmihalyi (1990) asserts that personal best goals are at the center of flow and sustained flow (another term explained in the literature as a replacement for DMC). In line with the literature, it can be suggested that Yunus was an intellectual who aimed at perfection in everything he invested time and energy. Thus, L2 learning was also a significant area for him to excel in. Ranking first in his class during each module and completing the prep school year with a high proficiency were goals coherent with his identity and self-concept. As for Ayşe, she had pragmatic reasons, such as moving to the US and having a good job there to support her family and siblings, to reach high proficiency, and be fluent in L2, which were in line with her identity and self. Having a collectivist cultural background and being her family's oldest child motivated her to create the goal of using L2 for higher financial well-being. The situation was pretty similar for DMC-like cases Hakan, Peri, and Faruk as well. It should be forewarned here that the reason why they were grouped as DMC resembling was not due to a lack of goal orientation in their experiences but mostly related to slight fluctuations in their positive emotionality. To continue after that clarification, investigation of goal orientation in their cases resulted in pragmatic reasons such as using L2 for an academic career, completing undergraduate education successfully and meanwhile joining the Erasmus program, or using L2 in the future job as a diplomat. These findings corroborate that of García-Pinar (2022) presenting similar pragmatic future goals of the DMC cases in her study, such as using L2 for Erasmus or having a job in an English-speaking country.

To continue with the findings related to the next key hallmark of DMC, the facilitative pathway, the literature suggests that having a valued end goal does not ensure the creation of DMC if a facilitative structure leading to the sustainment of intense motivational state is lacking (Başöz and Gümüş, 2022; Gümüş, 2019; Ibrahim, 2017). The

structure including behavioral routines, progress checks, and feedback was validated in DMC and DMC-like cases' qualitative data obtained via the interviews. A facilitative pathway with behavioral routines and regular progress checks is asserted in the literature to increase the learners' self-concept and self-efficacy, supporting the sustainment of L2 learning effort (Henry, Davydenko, & Dörnyei, 2015). Consistent with the findings in Sak and Gürbüz (2022) which presents the feeling of guilt experienced in the current after deserting some behavioral routines due to some obligations, the present study also found that a partial DMC case, Faruk, with persistent study routines, explained his feelings using a religious metaphor referring to a sin committed when the routines are deserted. The use of metaphorical language to describe the intense experience has also been reported by Dörnyei et al. (2016) and observed in Sak (2019). The last component of the facilitative structure, affirmative feedback, was discovered to significantly influence the intensity and sustainment of the current. Zarrinabadi and Tavakoli (2017) express that in long-term experiences such as DMC, regular feedback supports goal orientation and motivational intensity. Fishbach, Eyal, and Finkelstein (2010) and Fishbach and Finkelstein (2012) also provided similar explanations emphasizing goal commitment and persistence. In line with the literature, interview data revealed that both DMC cases sought regular feedback and valued them to see their progress and to have increased self-confidence. Yunus appreciated the feedback, especially from his instructors, since they were proficient and would make sound comments about his progress to energize him. Similarly, Ayşe was motivated by feedback from her instructors as well as her relatives living in English-speaking countries with native proficiency. It would be fair to argue that the expertise of the significant others giving feedback was a crucial criterion to fuel the energy of the DMC cases for goal-orientedness. The results were similar for partial DMC cases Hakan, Peri, and Faruk. However, in addition to the significant proficient others, Hakan also referred to the feedback from his friends since they made him feel cool; Faruk talked about her girlfriend's feedback energizing him; and Peri valued her parents' positive comments

about her improvement although they spoke beginner level English. It can be concluded here that DMC-like cases appreciated the feedback they received from their social circles as well.

Lastly, the results of this study validated positive emotionality as a significant hallmark of the intense motivational current. Positive emotionality is based on eudaimonic happiness which is related to engagement in activities leading to the fulfillment of self-concordant goals (Waterman et al., 2010). In line with this study, findings displayed that Yunus and Ayşe appeared to be in a positive emotional state supporting their goal orientation and persistence. Similar to Adam in Ibrahim's (2020) study, Ayşe was mainly in a positive mood fuelling her energy. Despite her optimism, though, she did not enjoy studying grammar and reported feeling bored while doing it, which points out that all language learning activities cannot be enjoyable by nature, even for DMC cases. This finding is widely supported in the literature in line with the reality that even though the activities in themselves may not be enjoyable for the learners, positive emotions leading to an intense motivational state are derived from completing each sub-goal and moving towards the significant end goal via these activities (Henry et al., 2015; Al-Hoorie, 2017; Dörnyei et al., 2016). On the other hand, Pietluch (2022) stated that devotion to intense long-term experiences such as DMC might lead to temporal feelings of physical and mental tiredness, especially in cases of dissatisfaction with the results. Being a pure and crystal clear DMC case, Yunus reported pursuing each activity of the language learning process with great emotional satisfaction. Nevertheless, he fluctuated slightly for a few hours when he could not get the score he expected from a quiz. Feeling inadequate and dissatisfied, even for a short time, led him to increase his effort and commitment to his studies which were supported in the literature by Sak and Gürbüz (2022). It could be asserted here that the vision of the target goal acted as an energizer for him to persist in his studies and work harder. Yunus had another energizer to boost his positive emotions: YouTube videos about some disadvantaged people's lives. Like Kardo in Ibrahim's (2020)

study, who watched motivational YouTube videos, Yunus watched some inspirational videos to remind himself of his opportunities for a qualified education life and thus to increase his effort, positive emotions, and motivational intensity to the optimum level.

Based on the findings of this study, positive emotionality appeared to be the component most vulnerable to fluctuations in the structure of DMC. It also significantly impacted the sustainment of other components. It was explained in the literature that being a lengthy process requiring a substantial amount of time and commitment, DMC can lead to feelings of exhaustion or boredom (e.g. İbrahim, 2020; Pietluch, 2022; Sak & Gürbüz, 2022). İbrahim (2020) advocated that even while dealing with daily activities, people in an intense motivational state are mentally and emotionally engaged in the learning process, which can be depletive. Thus, the affective aspect of DMC can be fairly asserted to be the determining factor for many cases whether to sustain the current till the end goal or keep some features of the current with less intensity and devotion. The partial DMC group in this study was created based on these criteria: the strength of the positive emotionality and its influences on the functioning of the other hallmarks of DMC. As suggested by Gümüş and Başöz (2021), several contextual factors, such as exam anxiety and classroom atmosphere, can have negative impacts on the power of DMC in instructional settings. Similarly, by Sak (2019), exam pressure and classroom climate were found to influence the motivational power of DMC strongly. According to the current study, Hakan in the partial DMC group and both cases starting in partial DMC and ending up in the No-DMC group, Melis and Oya, complained about these micro-level factors affecting their emotional states negatively. To clarify, exam anxiety was the most significant reason for Oya to desert the DMC-like experience. On the other side, Hakan and Melis complained about the module system leading to shifting classes and ending up in a new social environment after every 8 weeks. Due to this module system, they reported difficulties in feeling comfortable in the new environment and keeping their motivational intensity high. In line with these findings, it can be advocated that the

breakdowns in their positive affective states caused fluctuations in the structure of their DMC and resulted in significant adverse impacts upon the other hallmarks of their intense motivational state.

### ***The Role of Self-regulated Strategy Use in DMC***

Initial studies on DMC suggested that it does not require conscious control of the behavior through self-regulated strategy use because people caught up in that current do not experience any obstacles to overcome during the process (Dörnyei et al., 2014; Muir & Dörnyei, 2013). DMC was defined as an automatic process that both produces and uses the energy needed to function (Dörnyei et al., 2014; Muir & Dörnyei, 2013), and Dörnyei et al. (2016) stated that goal striving in intense motivational constructs like DMC cannot be explained via the use of self-regulation. On the other side, it was demonstrated by contemporary research that long-term constructs such as DMC would always bring out some challenges due to their emotionally and physically demanding nature (Başöz & Gümüş, 2022; Jahedizadeh & Al-Hoorie, 2021; Jahedizadeh et al., 2021; Pietluch, 2022; Sak & Gürbüz, 2022). Thus, the use of self-regulation strategies was likely for several purposes during the intense motivational state. For example, Başöz and Gümüş (2022) discovered that a DMC participant in their study preferred volitional control at the beginning of the current to create her study routines. Zarrinabadi et al. (2019) talked about regular progress checks as conscious control over the DMC state since conducting them without volitional control was impossible. Finally, Sak and Gürbüz (2022) emphasized the harmful emotional side effects of the intense motivational current and referred to coping strategies to handle them. The current study produced results that corroborate contemporary research findings on DMC while contradicting the earlier ones. The results displayed that the DMC process was not without obstacles and especially emotional fluctuations were observed in the data, which impacted upon the sustainment of the other hallmarks as well. Thus, all cases in four different DMC-related groups were revealed to employ conscious self-regulation strategies for various purposes. DMC cases Yunus and



Ayşe utilized meta-affective and meta-cognitive strategies most commonly. For the partial DMC cases, Hakan, Peri, and Faruk, cognitive and social-interactive strategy use were observed, and meta-cognitive and meta-affective strategies followed them. The last two groups with weak motivational intensity preferred cognitive strategies first, and meta-affective and meta-cognitive strategies were also detected in their data.

While the use of self-regulation strategies was predictable for the No-DMC group and ending up in the No-DMC group, it was contrary to early studies to detect them in pure DMC and partial DMC groups. Hence, the findings of the current study can be explained by contemporary research on DMC acknowledging the presence of potential fluctuations requiring conscious regulatory interventions. To exemplify, Sak and Gürbüz (2022, p.14) stated that "... positive emotions may not always be retained at all stages of DMC (see Dörnyei et al., 2015), and thus the portrayal of DMC as a universally positive experience needs to be refined". They also reported that to cope with the emotional challenges, the use of self-regulatory strategies was observed in their data, such as talking to friends about the situation, taking some time off to relax, or talking to a nonnative speaker of English to feel more comfortable after having difficulties interacting with a native. Uses of similar meta-affective strategies were displayed in this study in pure DMC and partial DMC cases. Yunus was observed to experience slight ups and downs in his positive feelings and he coped with them by using positive self-talk to encourage himself to persist, thinking about his previous achievements, and watching motivational videos on YouTube, which were the meta-affective strategies mentioned by him in the qualitative data. Ayşe and Hakan also reported using positive self-talk to refresh their positive emotions in cases of slight breakdowns, while Peri mentioned taking some time off to relax in cases of fatigue. According to Ibrahim (2020) and Muir and Gümüş (2020), it is crucial to re-trigger the motivational power in cases of distractions. Both the abovementioned DMC and partial DMC cases succeeded in it via meta-affective strategies in cases of breakdowns in their emotional states. Employing positive self-talk to

remind themselves of their valued end goals appeared to be a common meta-affective strategy preferred for that purpose in this study. It was also presented with the findings that minor setbacks in the structure of positive emotionality did not prevent the sustainment of the current, and they were eliminated via volitional actions to overcome them, which was confirmed by Pietluch (2022) as well.

Another significant finding of the current study was the use of meta-cognitive self-regulation strategies by the DMC cases. Başöz and Gümüş (2022) revealed the use of volitional control by a DMC case in their data to set her behavioral routines before the autopilot stage. She was focused on learning ten new words every day and watching music videos in English to practice her language skills. Although the upcoming stages were not investigated in the study to see whether the volitional control was sustained, it was seen that meta-cognitive self-regulation strategy use was present in the initial stage for goal setting and planning reasons. The results of the current study revealed that DMC cases Yunus and Ayşe and partial DMC cases Hakan, Peri and Faruk were also found to utilize metacognitive strategies for different purposes and planning was one of them. Ayşe resorted to meta-cognitive strategies to investigate how to be a better learner of English, which ended up in conscious searches of information online or from her instructors about it. However, her search for improvement was not restricted to the initial stages of her DMC state but was pursued intermittently throughout the current. On the other side, Yunus utilized metacognition to overcome slight obstacles he encountered during the current. To clarify, he had difficulty keeping up with the new information introduced in the new module and felt confused when he wrote everything in the same notebook. After some time thinking over the problem, he came up with the idea of having separate notebooks for grammar, phrasal verbs, and regular vocabulary items, which helped him immensely. In addition, he used planning as a strategy to continue his studies when he felt reluctant even for short periods, thus he could pursue hard work without breakdowns. While Hakan with DMC-like characteristics utilized metacognition to increase his exposure to L2, Faruk

preferred it with the same purpose as Yunus: to solve some problems during his study routines. Thus, it would not be unfair to talk about the presence of consciousness in their actions as well.

Besides the uncertainty in the DMC literature regarding the role of conscious self-regulation, cautious analysis of data is also suggested for the role of progress checks. While Dörnyei et al. (2015) presented regular progress checks as a core feature of the intense motivational current functioning in autopilot, Zarrinabadi et al. (2019) asserted that they could not be conducted without consciousness; thus, it is not fair to call DMC as a purely automatized process. The current study also revealed regular progress checks by pure DMC and partial DMC cases. They were deliberate processes that support the presence of volition in the DMC state. In Yunus's case, progress checks were conducted to follow the sub-goals he set based on his exam scores. Interview data revealed that Yunus set a score at the beginning of the module that he was planning to reach at the end, and he studied to reach that goal throughout the module, which shows a conscious act of goal setting and progress checks. Ayşe checked her progress via her improvement in speaking: she would focus on whether the interlocutor could understand her on the first try or she would have to repeat her utterances. How many times she would have to repeat herself was also vital for her since she regarded repetition requests more than once as her failure to express herself clearly. It can be stated here that the intended use of meta-cognition to check progress was available in Ayşe's case too. These findings are also supported by Peng and Phakiti (2022) who questioned the lack of volition in DMC asserted by Dörnyei and his colleagues. According to them, there is still not enough empirical research to define the framework as entirely unconscious. Peng and Phakiti (2022) state that the DMC framework is "multi-faceted and dynamic in nature" (p. 18) since its foundations are based on several theories in the field. Thus, it is a demanding task for researchers to differentiate between the uses of progress checks as a conscious meta-cognitive strategy or a motivational action, which was a challenge experienced by

the researcher of this study. In line with these reasons, they asserted that there is a need for more empirical research to clarify the hypotheses of the DMC framework and reveal whether progress checks function at the unconscious or conscious level as part of meta-cognitive self-regulation.

The most prominent finding to emerge from the analysis is that, except for the cases with a fully-fledged DMC experience, participants in the other groups favored cognitive strategies in the first place, which was supported by quantitative data. A possible explanation for this might be that cognitive strategy use is directly related to the language input (Oxford, 1990), hence creating the feeling of pursuing L2-related studies. To clarify, according to Oxford (1990), watching movies in L2 and studying grammar or vocabulary were the most prevalent cognitive strategies due to the direct interaction they provide with linguistic knowledge. The learners engaged in these activities can be speculated to feel satisfied with their commitment to L2 learning. In this study, cognitive strategies, such as keeping vocabulary notebooks, writing down sentences with the new words, and fragmenting or categorizing words to learn more efficiently, were commonly preferred to improve vocabulary knowledge. It can be suggested based on the results that since the prep-school education provided at this English-medium university was demanding, students were aware that they needed to learn enough vocabulary to improve themselves and pass the proficiency exam. Therefore, vocabulary learning was an essential requirement for them, and they primarily focused on that aspect of language via strategies that provided direct interaction with the language itself.

According to the findings, DMC-like cases also preferred cognitive self-regulation most commonly, indicating volitional control during direct interaction with language input. Although these participants were not in a fully-fledged DMC state, they still carried the core characteristics of the intense motivational state to a large extent, and their use of conscious control over the language learning process was worth attention. What is more surprising is that the pure DMC cases, Yunus and Ayşe, also mentioned cognitive strategy

use, though rarely, for vocabulary learning and revision purposes, which can be attributed to their previous learning habits (Sak, 2019) and again brings out the question of “Can DMC be a conscious process?” set forth by Peng and Phakiti (2022). Certainly, there is a need for further investigation to come up with a full answer to this intriguing question.

Lastly, self-regulation via social-interactive strategies appeared to be favored by DMC-like cases in the data, while the other groups did not prefer them. That scarcity of interest in interactive strategies can be attributed to the EFL context that the students were in while their individual L2-related goals can explain the enthusiasm of partial DMC cases: Hakan, Peri, and Faruk were all sociable participants learning L2 for communicative purposes such as joining Erasmus and Work & Travel programs, traveling the world, or socializing with international people around them. To make a small note, Ayşe also had similar L2-related goals and referred to the rare use of social-interactive strategies. Although they were also a part of an EFL context, their goals were in line with the global uses of L2, and hence they diverged from the other groups.

The findings reported so far about the role of self-regulation strategies in different groups suggest that self-regulation via “meta” strategies was significant for pure DMC cases since these strategies were utilized for higher-level purposes such as managing or regulating processes or emotions. DMC cases were observed not to have much trouble with learning language items, yet they needed volitional regulation due to the demanding nature of that lengthy and intense current. Thus, the strategies they preferred were most commonly at the “meta” level. On the other hand, No-DMC and ending up in No-DMC cases can be asserted to prefer cognitive strategies in the first place for similar reasons: they had difficulties with the language input and prioritized focusing on the language itself rather than dealing with managing issues. In addition, the prevalence of cognitive strategies revealed in the data can be attributed to the past learning experiences of the learners. To clarify, the participants all reported the 4<sup>th</sup> grade in primary school as the time they started learning English and they have all been through formal instruction in EFL

contexts. It is feasible to assert that vocabulary learning has always been one of the most demanding aspects of language learning in EFL contexts (Meara, 1980). It has a central role in communicative competence; however, different from syntax or morphology which can be acquired following certain rules, no solid procedures shape lexical knowledge. Thus, instructing learners to use vocabulary learning strategies to handle its challenges has been a common practice. Observing cognitive strategy use in the Turkish EFL context both in the DMC and the DMC-related groups is pretty understandable. Although learners with DMC experience create new behavioral routines during their intense motivational states (Dörnyei et al., 2015), they cannot be claimed to entirely desert their previous learning habits, which is also supported by Sak (2019).

### ***The role of Language Learning Effort in DMC***

Investigating the role of language learning effort in DMC and the related groups was another significant purpose of the last research question. To obtain data for this question, semi-structured interviews and motigraphs, asking participants to score their effort, motivational and affective states, were utilized. The use of graphic representations in addition to interviews was in line with previous studies of DMC (e.g. Henry, Davydenko, & Dörnyei 2015; Zarrinabadi & Khodarahmi, 2021). Bi-weekly submitted graphics provided a deeper inquiry into the participants' effort trajectories and motivational and emotional states. Motigraphs also enabled the researcher during the follow-up interview sessions to dwell on the reasons behind the breakdowns observed in the graphics and assisted the participants in reflecting on these breakdowns thinking retrospectively in a guided way.

Motigraphs are valuable to reflect the dynamic and non-linear nature of DMC. In this study, they revealed an interactional representation of the participants' effort, motivational and affective states. Findings indicated that while a change in one variable was sometimes accompanied by similar changes in others, it was not necessarily the case all the time, which has support in the literature (Peng & Phakiti, 2022). To clarify, Yunus, with a fully-fledged DMC state, had reported experiencing a slight breakdown in his

affective state, which was not observed in the effort and motivational domains in the graphic. Similarly, Ayşe seemed to pursue her high-level effort trajectory even when she was bored with the mechanical aspect of the language, namely grammar. Thus, it can be suggested that they both had a consistent language learning effort trajectory with no breakdowns in the intensity of it. These results agree with that of Dörnyei et al. (2014), stating that people in DMC put the immense effort that is not expected from them into the learning process and achieve more than they could imagine. The findings also provide further support for Gümüş (2019) and Selçuk and Erten (2017), indicating that DMC can have positive influences on sustaining the long-term intensity of factors such as effort.

Ibrahim (2020) showed that the strength of effort in the language learning process could not be explained simply by a physical preoccupation with the language learning materials or the number of hours spent sitting at a desk and studying with the books. In addition, cognitive, emotional, and mental engagement should be considered. Besides DMC cases Yunus and Ayşe, Hakan, and Faruk as partial DMC learners provided significant data supporting these explanations, in that, although they were not always observed to be physically occupied with the language learning process, they were engaged with it cognitively, emotionally and mentally. To exemplify, Hakan would speak in English and think about possible ways to do that in and outside the school. He would carry out daily activities, such as keeping a diary, using the smartphone, and ordering food in a restaurant (within a role-play situation with his friends) in English. He had integrated language learning into his whole life and substantially enjoyed doing them, which confirms his significant engagement with the language. Although he did not spend long hours sitting at a desk and practicing classroom activities, he could still be categorized as a DMC-like learner. Similarly, Faruk described his study routines within two categories: concrete and abstract studies. While concrete studies referred to pen-and-paper ways of engagement with the language, abstract studies were in the form of extracurricular activities such as watching movies or videos in English, listening to music in English, and

being in social environments with English-speaking people to practice. These results reflect those of Sak (2019), which also reported a DMC case engaged with the L2 only via extracurricular activities due to her unwillingness to pursue “formal instructional practices followed in the classroom setting” (p. 76). Hence, it can be concluded that being in a DMC or partial DMC state brings out its ways of engagement with the language which is not restricted to the traditional physical preoccupation with the classroom materials.

Another significant finding regarding the DMC-like cases was that while some emotional breakdowns were observed in their data due to various reasons such as feeling bored with the grammar topics, having problems in private life, or feeling anxious because of exams, they did not cause malfunctioning in Hakan's effort trajectory; however, they impacted upon Faruk's and Peri's engagement with the language to some extent. This interesting result could be explained by the fact that Hakan shaped his language learning practices based on the activities he enjoyed; thus, even though he disliked grammar, he could integrate it into speaking activities he liked dealing with, and in that way, he could pursue his effort. It would be fair to claim that using this meta-affective strategy helped him sustain his high effort despite the negative emotions caused by dull mechanical studies. On the other side, negative feelings resulting from the constant changes in the classroom environment did not appear to exert a significant negative impact on his effort, which can be attributed to the fact that his L2 learning process was mostly focused on doing daily activities in L2 outside the classroom context. He could still sustain his practices with friends he enjoyed socializing with and used L2 outside the school. It can be speculated based on these results that participants' preferred ways of learning routines are pretty influential on their effort states. Although Faruk also pursued extracurricular activities more than formal classroom practices, his effort trajectory was affected by the negative emotions he experienced in his private life. That discrepancy may partly be explained by the fact that Faruk was different from Hakan in that he had both traditional pen and paper and extracurricular routines. In contrast, Hakan had inserted L2 into his



whole life as a natural component of his daily routines. To conclude, exerted effort in that group appeared to be shaped by individual factors based on personal and dynamic characteristics in the intense motivational current.

The findings revealed vital breakdowns in the effort states of the cases that started the period with partial DMC characteristics; however, ended up in a No-DMC state due to the intensity of emotional challenges they could not handle. While Oya lost her partial DMC features due to exam anxiety, Melis was influenced by her new classroom environment besides her mother's health issues. The classroom-related findings mentioned above can be explained by the challenges of formal instructional settings, which is supported by Sak (2019) and Başöz and Gümüş (2022), indicating that classroom climate and exam pressure were two main factors supporting or impairing DMC experiences. While a positive classroom atmosphere in terms of intellectual and social aspects would motivate the participants, a manageable exam pressure would inspire them to study further. On the other hand, an adverse classroom climate due to demotivating classroom materials and practices would impair the sustainment of DMC-related features, and extreme exam anxiety would lead to an uncontrollable emotional burden. In this study, negative effects of social and interactional practices in class and extreme levels of exam stress were observed in Oya's and Melis's motivational trajectories resulting in a loss of motivational intensity, language learning effort, and positive feelings. To conclude, the language learning effort exerted in this group was determined by their emotional and motivational states.

The most expected findings of the study emerged from data regarding the effort trajectory of No-DMC cases, Esra and Reha. Despite being good students caring about their responsibilities, they did not represent any primary characteristics of the intense motivational current, and it seems fair to postulate that they experienced significant instabilities in their effort states due to their lack of goal-orientation, low motivational intensity, and fluctuating emotional states (Dörnyei et al, 2015). What is conspicuous is

that they could keep their effort states higher than the motivational and emotional domains, which can be attributed to the fact that they did not want to get completely off track in their language learning processes and wanted to exercise their responsibilities. Moreover, a slight increase was observed in their commitment to L2 learning during the last weeks and a possible explanation for this might be that the upcoming end-of-course-test functioned as a triggering factor for them to increase their effort.

Lastly, qualitative data from four different groups in this study brought out a common result: none of them claimed to endeavor enough to learn L2, and all stated a wish to increase it. This rather intriguing result might be related to the fact that participants in this study were students either with characteristics of DMC (full or partial) or highly motivated students caring about their improvement and responsibilities. Hence, this finding seems to be consistent with their motivational intensity although the level of the desire for further effort can be considered to exist in a continuum rather than a pure fact.

To conclude, the sustainment of lengthy language learning efforts and the use of conscious self-regulation in both DMC and DMC-related groups appeared to be impacted by several personal and contextual factors representing the dynamicity of the construct in nature. According to these data, it could be asserted that grasping the essence of a fully-fledged DMC experience cannot be ensured without a robust investigation of these individual difference factors and several excluded ones in this study, which may induce more satisfying DMC experiences.

### **Pedagogical Implications of the Study**

Based on the results of this study, several pedagogical implications can be suggested. First, quantitative data revealed the central role of L2 vision on DMC both directly and indirectly by supporting the ideal L2 self and L2 learning effort. Thus, the significance of vision-setting activities in language classes to encourage the learners to construct a clearer vision of their ideal L2 self and exert further effort to learn L2 has been

revealed. In addition, by implementing vision-maintenance activities to help learners keep their vision alive until reaching their end goal, it would be possible to support the learners for longer terms of this current. Concerning the fact that vision is one of three hallmarks of DMC, interventions designed to strengthen it would pave the way for a more robust and durable DMC experience. To do so, educators can devise their activities or refer to the ones designed by Hadfield and Dörnyei (2013) with these purposes. The L2 curriculum can also be revised to promote EFL learners' vision setting and vision maintenance skills in the context of second/foreign (L2) learning.

Secondly, encouraging learners to put effort into the L2 learning process and providing emotional support to help them sustain their effort state appeared to be significant in the study. Findings showed that participants' commitment to the L2 learning process was influenced mainly by their affective states, and breakdowns in positive emotions resulted in breakdowns in the effort. Thus, ensuring the sustainment of positive emotionality in the current via introducing emotional regulation strategies (meta-affective strategies) or frequent use of affirmative feedback by language instructors can help learners pursue their commitment to L2 in formal instructional settings. Gaining autonomy via conscious use of self-regulation and getting positive feedback from the instructors might ensure optimizing emotional and motivational states triggering effort and finally increasing the likelihood of inducing individual-level DMC in L2 classrooms. Considering that the breakdowns in the emotional and motivational trajectories were the main determiners of L2 learning effort, it can be asserted that low achieving students might also be induced via effective use of these interventions to reach optimum levels of L2 motivation or even DMC related (e.g. pure DMC, DMC-like) states.

Findings regarding the use of conscious self-regulation in pure DMC and DMC-related experiences in formal instructional settings reflect the need for teaching learners how to self-regulate via some external practices so that the strength and longer-term sustainment of the current could be enhanced. Although DMC has been initially defined as

an intensive drive to act without conscious control (Dörnyei et al., 2014; Muir & Dörnyei, 2013), contemporary research, including the current one, validated its demanding nature. Since such intense motivational states require substantial amounts of investment in terms of time, energy, and psychological resilience, the need for conscious control via meta-affective, meta-cognitive, and cognitive self-regulation strategies to sustain the current for more extended periods was confirmed in the study. Due to these reasons, some adaptations in the L2 curriculum to include specific interventions could help stimulate self-regulated learning, and learners with DMC would also benefit from them. For example, teaching “proactive ways to help learners develop self-regulatory strategies for dealing with and navigating the demands of intense motivational commitment” was suggested quite recently by Sak and Gürbüz (2022). Within the scope of the present study, teaching meta-affective and meta-cognitive strategies proactively for emotional and organizational regulation could help DMC learners pursue their intense motivational features and overcome the obstacles encountered in-process. They could also be instructed about how to learn L2 more successfully and use these self-regulation strategies more productively. To do so, during the first and second weeks of the educational year, classroom seminars could be organized.

The findings also underlined the importance of cognitive strategy use for vocabulary learning. It appeared that learners in that instructional context valued vocabulary learning significantly and strived to improve themselves in it. In line with these findings, it seems fair to postulate teaching productive ways of cognitive self-regulation strategies in language classes. Considering that both pure DMC cases and the other DMC-related cases preferred cognitive self-regulation, it would be wise to include them in the curriculum and allocate class time at the beginning of the academic year to instruct the learners about it.

### **Methodological Implications of the Study**

This study was performed using a mixed-method research design. Qualitative data obtained via first and follow-up interviews and language learning diaries provided explanatory and exploratory support for quantitative findings. To clarify, the study was initially designed to investigate three groups of learners, pure DMC, partial DMC, and No-DMC, to see the interaction between their DMC-related states and the specified individual difference factors. However, qualitative data revealed an unexpected group who started the module with partial DMC characteristics and completed it with a No-DMC state. The emergence of a new group during this stage supported the exploratory power of qualitative designs. It confirmed the conscious decision to use mixed method research design to further support and explain quantitative results.

In addition, this study included motigraph data to examine the dynamic nature of intense motivational current. However, findings suggested that the use of motigraphs should be approached cautiously since they are self-plotted by the participants and affected by their momentary feelings and perceptions. To clarify, a fluctuation in the emotional state of a partial DMC case in the motigraph did not have any support in the interview or diary data. Even when he was asked directly to explain the rationale behind his choice of the specific score, he could not come up with any explanation other than stating that his decision was utterly related to his feelings at the moment of scoring. A more clear incongruence between the motigraph data and the qualitative data has been indicated in another case: while her motigraph data gave the impression that she could increase her effort and return to her DMC-like state after two weeks ups and downs, her follow-up interview data and language learning diaries showed that she could not function with DMC-like characteristics after the obstacles she had to deal with. Thus, it should be cautioned that self-plotted motigraphs may not always offer completely reliable results, but only the participants' perceptions or insights at the moment of marking are reflected. That was the reason why motigraph data and qualitative data collected through various tools in

this study were reported in relation to each other to see their supporting and contradicting points in the qualitative findings chapter.

## Chapter 6

### Conclusion, Limitations, and Suggestions

This study set out to be the first structural investigation of the dynamic interactions between DMC and individual differences such as self-regulatory strategy use, L2 learning effort, ideal L2 self, and imaginary capacity/vision in the Turkish EFL context. Following a longitudinal mixed method research design, it also aimed to unearth, via qualitative analysis, the roles of self-regulatory strategy use and L2 learning effort in the power and long-term sustainment of DMC experiences. For these purposes, a composite survey instrument was used in the quantitative stage, and then, language learning diaries, one-to-one interviews, and motigraphs were utilized in the qualitative one for a deeper inquiry into the most striking findings of the preceding step.

In this final chapter of the study, the conclusion, limitations, and suggestions for further research will be presented.

#### Conclusion

This study has shown that the DMC experience was subjective to be affected by the individual differences of the learners. To clarify, self-regulated strategy use and language learning effort of L2 learners directly and strongly predicted their DMC states, which means higher levels of strategy use and effort to learn L2 would lead to higher DMC disposition scores. While the ideal L2 self had an indirect effect on DMC experiences, the imaginary capacity/vision of L2 learners exerted both direct and indirect effects on it proving a central role in that interactional analysis. Being a core component of the DMC structure as well, its great power and effect were not unexpected. These findings emphasized that rather than functioning in a standard linear pattern for each learner; DMC would be experienced in diverse ways by different learners leading to variations in the length and intensity of it. Thus, a more profound understanding of the key individual

difference variables with strong influences on the dynamicity of the DMC state could promote its initiation and sustainment.

Further investigation of the roles of volitional self-regulatory strategy use in DMC exhibited that it was a strong predictor of DMC experiences leading to increased power and sustainment of the ongoing super motivation. Contrary to several initial dispositions neglecting the impact of conscious self-regulatory interventions during DMC states, learners with pure DMC and partial DMC features apparently utilized them to overcome the emotional, physical, and mental challenges of the intense motivational current. It was revealed that meta-affective and meta-cognitive strategies were preferred by tertiary-level EFL learners with a fully-fledged DMC state in this study. Although they did not have difficulties with the language items, they needed these strategies to set their emotions and overcome the complications in the current. On the other hand, participants in the DMC-like group, starting in DMC-like and ending in the No-DMC group and purely No-DMC group appeared to prefer cognitive strategy use in the very first place. The rationale behind that conscious preference was vocabulary learning and practicing. These findings demonstrate the volitional use of self-regulatory strategies during DMC experiences and confirm their contributions to empower the current for longer periods. This research has provided a dynamic investigation of the participants' L2 learning effort states and findings indicated that language learning effort was mostly in active operation in line with the motivational and affective states. Emotional fluctuations experienced during the intense period appeared to have a significant impact on motivational intensity, and consequently, commitment to the process. These findings imply the significance of pursuing positive emotional states and motivational intensity for higher effort states and meta-affective interventions can contribute to this process.

The last major finding of the study was that classroom environment, exam anxiety, and personal issues would impact the strength of DMC states and they had the potential to cause emotional breakdowns in the structure of DMC. However, findings revealed that



volitional self-regulatory interventions via meta-cognitive and meta-affective strategies helped minimize the adverse effects of these challenges. While some learners with partial DMC characteristics still pursued the intense current due to the effective use of self-regulation, some others failed to do so and lost their DMC-resembling characteristics. That finding emphasized the significance of contextual factors in language classes and highlighted the efficient use of self-regulation to eliminate their negative effects, finally promoting the sustainment of intense motivational states.

All in all, we conclude that DMC is a dynamic state strongly influenced by ID characteristics. Contrary to initial studies by the developers of that construct (Dörnyei and his colleagues) suggesting that DMC is an automatized process without self-regulatory actions needed, the findings reported here shed new light on conscious self-regulatory strategy use during the intense current due to the emotionally, and physically and mentally demanding nature of it. The use of mainly meta-strategies by pure DMC cases provides evidence for the existence of these challenges. In addition, language learning effort appeared to follow a dynamic pattern in line with the affective and motivational states of the learners. Thus, regulating the emotions and motivational intensity could strengthen the learners' efforts. Finally, imaginary capacity/vision and ideal L2 self were strong determiners of the learners' tendency to have DMC experiences. These results add to the expanding literature on ID variables in relation to DMC and it can be concluded here that manipulating these ID characteristics via external interventions could enhance the initiation, strength, and long-term maintenance of the intense motivational experience.

### **Limitations of the Study**

In this study, some limitations could affect the results unless actions were not taken to eliminate them. First of all, the setting of the study was restricted to one school of foreign languages at a state university in Ankara. Other state universities in Ankara and different cities as well as private higher education institutions in Turkish are not

represented in this research. Thus, findings cannot be generalized to a wider population of EFL learners in the Turkish context and need to be interpreted within their settings.

The study includes methodological limitations as well. Employing a longitudinal mixed-method research design, follow-up interviews were significant data collection tools for the critical cases of the study. These interviews were conducted at the end of the 8 weeks of language learning diary keeping and the cases were asked retrodictive questions requiring them to recall previous weeks of the module. Although the diaries they submitted were used to help them recall their experiences during the specific weeks, they still had slight difficulties remembering a few details that could provide information about the dynamic changes in their trajectories. Thus, the weeks with missing data were handled and reported cautiously in the findings section. No concise judgments were presented regarding the little lost parts of the puzzle.

Finally, the structure of DMC itself caused limitations for the current study. To clarify, being a novel construct in the L2 motivation field, some hallmarks of it need further clarification and consensus among motivation researchers (Peng & Phakiti, 2022), so that it could be possible to make more precise decisions, for example, to call goal-setting or progress checks as pure components of DMC or as conscious meta-cognition as well. The researcher had difficulties while making these decisions. The literature also being ambiguous about that point itself could not make the work easier for the researcher. Although she could handle the process thanks to expert opinion and inter-coder reliability checks, it was a challenging process and a foolproof final judgment cannot be claimed. Taking the limitations reported in this part into account, suggestions for further studies will be presented in the upcoming section.

### **Suggestions for Further Research**

In this study, a longitudinal research design with a dynamic perspective was employed and real-time DMC was scrutinized in relation to self-regulatory strategy use, L2

learning effort, ideal L2 self, and imaginary capacity/vision in a tertiary-level EFL context. However, it was conducted in a restricted setting with a limited number of participants. Thus, replicating the research in different language learning contexts for larger populations is suggested for future DMC studies. Exploring distinct ID factors such as self-efficacy and self-concept, and associating the interactions with L2 learning achievement, which is the ultimate goal in the language learning process, could provide valuable information. In addition, following the suggestions by Peng and Phakiti (2022) as well, there is a need for further research to distinguish between the core features of DMC and some conscious self-regulatory actions such as progress checks. Rather than retrospective investigations of the construct with the challenges of recalling past, real-time designs with a specific focus on these distinctions and asking DMC cases to justify the reasons for each decision might help in understanding the rationales behind their actions in the process. Thus, the structure of DMC can also be further clarified for a more robust description of the construct.

Finally, DMC has been revealed in the literature to be prominently influenced by contextual reasons (Sak, 2019). Despite the lack of particular focus on contextual determiners in the current investigation, qualitative findings displayed the effect of classroom and school context as well as family context on the strength and sustainment of DMC states. Further investigation on the contextual factors estimating the pursuit or abandoning of the intense motivational current is suggested for prospective research. Grounding them on longitudinal designs adopting a dynamic perspective might entail valuable information.

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## APPENDIX-A: Survey Instruments of Pilot Study in English

### DMC Disposition Questionnaire (Muir, 2016)

#### Understanding long-term motivation

Before beginning, please choose one of the below two options:

- I am under 16
- I am 16 or over

We find accounts on the internet of people being totally absorbed in VERY INTENSE PROJECTS which motivate them for weeks or even months at a time.

These people say things like:

- "I think about this project day and night – I feel like it's taken over my life!"
- "I'm amazed I've been able to stay so focused for so long, I'm so enjoying it that putting in all the work feels easy!"
- "I never thought I could achieve so much!"
- "My friends can definitely see that something special is happening to me, they say they've never seen me so motivated!"
- "I wish I could experience this type of motivation while working towards all my goals!"



Please answer the following questions by marking the appropriate answer

#### About your intense motivational project

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
When looking back now, I have very good memories of this time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
During this time I was able to work more productively than I usually can	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I surprised myself with how much I was able to do	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Many times it felt like a real struggle to keep going	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This experience helped me to achieve all I had wanted to and more	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think something special happened to me during this experience - it was an amazing time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**A little more about your intensive project experience...**

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
At the time, this project became a central part of my life	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The people around me could see that I was experiencing something special	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It didn't feel like hard work at the time - I was just caught up in the flow!	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I remember thinking about my goal all the time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I often imagined myself achieving my final goal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It was a really enjoyable experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Self-Regulated Foreign Language Learning Strategy Questionnaire (Srfllsq) (Habok and Magyar, 2018)**

When I learn English, ...

**Metacognitive**

1. I think of the relationships between what I already know and new things I learn in English.
2. I first skim an English passage, then go back and read carefully.
3. I look for opportunities to read as much as possible in English.
4. I write notes, messages, letters, or reports in English.
5. I plan my schedule so I will have enough time to study English.
6. I pay attention when someone is speaking English.
7. I make summaries of information that I hear or read in English.
8. I try to find out how to be a better learner of English.

**Cognitive**

9. I connect the sound of a new English word and an image or picture of the word to help me remember the word.
10. I use the English words I know in different ways.
11. I find the meaning of an English word by dividing it into parts that I understand.



12. I use new English words in a sentence so I can remember them.
13. I try to find patterns (grammar) in English.
14. I try not to translate word for word.

**Meta-affective**

15. I notice if I am tense or nervous when I am studying or using English.
16. I encourage myself as I learn English so that I can learn what I would like.
17. I read in English as a leisure-time activity.
18. I organize my English language learning so that I always enjoy doing it.
19. I plan my English language learning so that I can perform better.
20. I have more success learning English when I feel like doing it.
21. I give myself a reward or treat when I do well in English.
22. I try to relax whenever I feel afraid of using English.

**Meta-sociocultural-interactive**

23. I try to learn about English-language cultures and/or other cultures through English.
24. I look for people I can talk to in English.
25. I look at English-language TV shows, movies, or websites to get to know the cultures of English native speakers and/or other cultures through English.
26. I choose leisure activities where I encounter English-language cultures and/or other cultures through English as well.
27. I plan what I want to find out about the cultures of English speakers and/or other cultures through English.
28. I practice English with my peers.
29. I look for similarities and differences between my own culture and the cultures of English native speakers and/or other cultures through English.
30. Getting to know English-language cultures helps me to learn the language.

**Sociocultural-interactive**

31. I start conversations in English.
32. I make up new words in English if I do not know the right ones.
33. When I speak with highly proficient speakers of English, I think it is important to get acquainted with their culture.
34. I encourage myself to speak English even when I feel afraid of making a mistake.

**Questionnaire of English Self-efficacy (QESE) (Wang, 2004)**

1. Can you understand stories told in English?
2. Can you finish your homework of English reading independently?
3. Can you understand American English TV programs?
4. Can you introduce your school in English?
5. Can you write diaries in English?
6. Can you give directions from your classroom to your home in English?
7. Can you write English compositions assigned by your teachers?
8. Can you tell a story in English?
9. Can you understand radio programs in English speaking countries?
10. Can you understand English TV programs made in China?
11. Can you leave a message to your classmates in English?
12. When you read English articles, can you guess the meaning of unknown words?
13. Can you make new sentences with the words just learned?
14. Can you write email messages in English?
15. If your teacher gives you a tape-recorded English dialogue about school life, can you understand it?
16. Can you understand the English news on the Internet?
17. Can you ask questions to your teachers in English?
18. Can you make sentences with English phrases?
19. Can you introduce your English teacher in English?

20. Can you discuss in English with your classmates some topics in which all of you are interested?
21. Can you read English short novels?
22. Can you understand English movies without Chinese subtitles?
23. Can you answer your teachers' questions in English?
24. Can you understand English songs?
25. Can you read English newspapers?
26. Can you find the meaning of new words by using English-English dictionaries?
27. Can you understand numbers spoken in English?
28. Can you write diaries in English?
29. Can you understand English articles about Chinese culture?
30. . Can you introduce yourself in English?
31. Can you write an article about your English teacher in English?
32. Can you understand new lessons in your English book?

**The Foreign Language Learning Effort Scale (FLLES) (Karabiyik and Mirici, 2018)**

1. I prepare well for my foreign language exams.
2. I engage in disruptive behaviors in classes.
3. I review the topics covered in my foreign language class.
4. I do my homework on time.
5. I review the topics to be covered in my class.
6. I attentively listen to my instructor.
7. Even if I am not given homework assignments I practice from various sources.
8. I cheat on exams.
9. I engage in foreign language mediums in out-of-class activities (e.g. read books, watch movies, speak to foreigners, etc.)
10. I submit my homework on time.
11. I revise my assignments if I receive any corrections.
12. I attentively listen to the contributions made by my peers.

13. I consult my foreign language instructor or other experts for advice on how to improve my English.
14. I plagiarize my homework assignments.
15. If possible, I volunteer for extra homework assignments.
16. I carry out the assigned in-class tasks.
17. I concentrate solely on the lesson in my classes.

#### **Imaginative capacity Instrument (Kim & Kim, 2014)**

1. When someone tells me about an interesting place, I imagine what it would be like to be there.
2. I get drifted away by imagination.
3. When I feel distressed, I imagine things that make me feel happy.
4. When I read an interesting story, I imagine its events and characters.
5. I imagine being in a good place when running into problems.

#### **Future L2 self-guides Instrument (Taguchi et al., 2009) - Ideal L2 self**

1. I can imagine myself living abroad and having a discussion in English.
2. I can imagine myself living abroad and using English effectively for communicating with the locals.
3. I can imagine a situation where I am speaking English with foreigners.
4. I can imagine myself speaking English with international friends or colleagues.
5. I imagine myself as someone who is able to speak English.
6. I can imagine myself speaking English as if I were a native speaker of English.
7. Whenever I think of my future career, I imagine myself using English.
8. The things I want to do in the future require me to use English.
9. I can imagine myself studying in a university where all my courses are taught in English.
10. I can imagine myself writing English e-mails fluently.

## APPENDIX-B: Survey Instruments of Pilot Study in Turkish

Değerli Öğrenciler,

Bu çalışmanın amacı İngilizceyi yabancı dil olarak gören hazırlık sınıfı üniversite öğrencilerinin hedefli motivasyon akımlarını, öz düzenleme becerileri kullanımlarını ve bu kullanımların hedefli motivasyon akımları ile ilişkilerini ortaya çıkarmaktır.

Anket 20 dakikadan fazla sürmeyecektir ve vereceğiniz cevaplar öğrencilerin İngilizce öğrenirken neden ve nasıl uzun vadeli motivasyona sahip olduğunu anlamamız açısından çok önemli olduğu için dikkatlice ve gerçekçi bir şekilde doldurmaya gayret ediniz!

Ölçekte yer alan ifadeleri ne ölçüde karşıladığınızı **1 ile 5 arasındaki** rakamlardan birini daire içine alarak belirtiniz.

**ÖNEMLP:** Verilen ifadeler için herhangi bir doğru ya da yanlış cevap yoktur. Bu yüzden, sadece sizi en iyi şekilde anlatan ifadeyi düşünerek puanlayınız. Cevaplarınız araştırmacı dışında hiç kimse tarafından görülmeyecek, değerlendirilmeyecektir. **Lütfen hiçbir soruyu bos bırakmayınız.**

İlginiz için teşekkürler!

### **BÖLÜM I: Demografik Bilgiler**

1. **Cinsiyetiniz:** Kız ( ) Erkek ( )
2. **Yaşınız:** .....
3. **Bölümünüz:** .....

### **BÖLÜM II: Uzun süreli motivasyonu anlama hakkında**

**Lütfen aşağıdaki tabloda yer alan soruları cevaplamadan önce aşağıdaki açıklamayı dikkatlice okuyunuz.**

Kendilerini haftalarca ya da aylarca motive edebilen çok yoğun projeler ya da görevlere tüm dikkatlerini veren insanların hikayelerini internette bulabiliyoruz.

Bu insanlar şu gibi şeylerden bahsetmektedirler:

- “Bu projeyi gece gündüz düşünüyorum- ve onun tüm hayatımı ele geçirdiğini düşünüyorum!”
- “Bu kadar uzun süre odaklanmış kalabildiğime hayret ediyorum, o kadar çok eğleniyorum ki onunla, bu kadar çok çalışmak hiç zor gelmiyor!”
- “Hiç bu kadar başarı elde edebileceğimi düşünmemiştim!”
- “Arkadaşlarım bendeki değişikliği açıkça fark edebiliyorlar, ve beni bu zamana kadar hiç bu kadar motive olmuş görmediklerini söylüyorlar!”
- “Keşke bütün hedeflerim için çalışırken böyle motive olsam!”

1. **Ne sıklıkla sizce böylesine yoğun bir motivasyon türünü yaşadığınızı aşağıdaki seçeneklerden birine çarpı işareti (X) koyarak belirtiniz?**

- ( ) Bu tür bir motivasyonu HİÇ yaşamadım. **(Cevabınız bu seçenekse, lütfen bölüm IV' den devam ediniz.)**
- ( ) Bu tür bir motivasyonu SADECE BİR KEZ yaşadım, fakat yukarıda anlatıldığı kadar yoğun değildi.
- ( ) Bu tür bir motivasyonu DEFALARCA yaşadım, fakat yukarıda anlatıldığı kadar yoğun değildi.
- ( ) Bu tür bir motivasyonu SADECE BİR KEZ yaşadım, yukarıda anlatılan yoğunluğa benzerdi.
- ( ) Bu tür bir motivasyonu DEFALARCA yaşadım, yukarıda anlatılan yoğunluğa benzerdi.

### **BÖLÜM III: Yoğun motivasyon deneyimi hakkında**

**Aşağıdaki ölçekte yer alan ifadeleri ne ölçüde karşıladığınızı 1 ile 5 arasındaki rakamlardan birini işaretleyerek belirtiniz.**

1 = Hiç Katılmıyorum 2 = Katılmıyorum 3 = Kararsızım 4 = Katılıyorum 5 = Kesinlikle Katılıyorum					
1. Geriye baktığımda, bu tür bir deneyimi yaşadığım zamana dair çok iyi izlenimim var.	1	2	3	4	5
2. Bu süreç boyunca normalden çok daha verimli çalışabiliyordum.	1	2	3	4	5
3. Bu kadarını yapabildiğime ben bile şaşırımdım.	1	2	3	4	5
4. Bu deneyim esnasında çoğu zaman aynı motivasyonu sürdürülebilmekte zorlandım.	1	2	3	4	5
5. Bu deneyim bana hedefimle ilgili tüm yapmak istediklerimde ve hatta daha fazlasını başarmamda yardım etti.	1	2	3	4	5
6. Bu deneyim esnasında bana alışılmadık bir şeylerin olduğunu düşünüyorum- gerçekten büyüleyici bir zamandı.	1	2	3	4	5
7. Bu yaşadığım deneyim, o esnada benim hayatımın merkezinde yer aldı.	1	2	3	4	5

8. Beni tanıyanlar benim alışılmadık bir şeyler deneyimlediğimi fark ediyorlardı.	1	2	3	4	5
9. Bu yaşadığım deneyim boyunca hiç zorlanmadım-Kendimi sürecin akışına bırakmıştım.	1	2	3	4	5
10. Bu yaşadığım deneyim boyunca hedefim hiç aklımdan çıkmıyordu.	1	2	3	4	5
11. Kendimi hep nihai hedefime ulaşmış hayal ediyordum.	1	2	3	4	5
12. Gerçekten hoş bir deneyimdi.	1	2	3	4	5

#### **BÖLÜM IV:**

#### **Öz-Düzenleme Becerileri, Dil Öğrenme Çabası, İdeal Yabancı Dil Benliği, Zorunlu Yabancı Dil Benliği, Görselleştirme Becerisi ve Öz-Yeterlilik Ölçekleri**

		Hiçbir zaman	Nadiren	Bazen	Sık sık	Her zaman
1.	İngilizcede bildiğim şeylerle yeni öğrendiğim şeyler arasındaki ilişkileri düşünürüm.	1	2	3	4	5
2.	Bir İngilizce okuma parçasını önce gözden geçirir sonrasında geri dönüp dikkatlice okurum.	1	2	3	4	5
3.	Mümkün olduğunca fazla İngilizce okuma yapmak için fırsat ararım.	1	2	3	4	5
4.	İngilizce notlar, mesajlar, mektuplar veya raporlar yazarım.	1	2	3	4	5
5.	Programımı önceden planlarım, böylece İngilizce çalışmak için yeterli zamanım olur.	1	2	3	4	5
6.	Biri İngilizce konuşurken dikkat kesilirim.	1	2	3	4	5
7.	İngilizce duyduğum veya okuduğum bilgilerin özetlerini çıkarırım.	1	2	3	4	5
8.	Nasıl daha iyi bir İngilizce öğrencisi olacağımı keşfetmeye çalışırım.	1	2	3	4	5
9.	Bir kelimeyi hatırlamama yardımcı olması için, bu yeni kelimenin okunuşu ile görüntüsünü veya resmini ilişkilendiririm.	1	2	3	4	5
10.	Bildiğim İngilizce kelimeleri farklı şekillerde kullanırım.	1	2	3	4	5
11.	İngilizce bir kelimenin anlamını, kelimeyi anlayabileceğim şekilde	1	2	3	4	5

	parçalara bölerek bulurum.	
12.	Yeni öğrendiğim İngilizce kelimeleri cümle içinde kullanırım, böylece onları hatırlayabilirim.	1 2 3 4 5
13.	İngilizcede kalıplar (dilbilgisi kuralları) bulmaya çalışırım.	1 2 3 4 5
14.	Kelimesi kelimesine çeviri yapmamaya çalışırım.	1 2 3 4 5
15.	İngilizce çalışırken veya kullanırken gergin veya kaygılı isem bunu fark ederim.	1 2 3 4 5
16.	İngilizce öğrenirken kendimi cesaretlendiririm, böylece öğrenmek istediğim şeyleri öğrenebilirim.	1 2 3 4 5
17.	Boş zaman aktivitesi olarak İngilizce okumalar yaparım.	1 2 3 4 5
18.	İngilizce öğrenme sürecimi düzenlerim, böylece daima öğrenmekten keyif alırım.	1 2 3 4 5
19.	İngilizce öğrenme sürecimi planlarım, böylece daha iyi performans gösterebilirim.	1 2 3 4 5
20.	Gerçekten istediğim zaman, İngilizce öğrenmede daha başarılı olurum.	1 2 3 4 5
21.	İngilizcede iyi bir şey yaptığımda kendime ödül veririm.	1 2 3 4 5
22.	Ne zaman İngilizce kullanmaktan korksam rahatlamaya çalışırım.	1 2 3 4 5
23.	İngilizceyi kullanarak, İngiliz dili kültürünü ve/veya diğer kültürleri öğrenmeye çalışırım.	1 2 3 4 5
24.	İngilizce konuşabileceğim insanlar ararım.	1 2 3 4 5
25.	İngilizce aracılığıyla, İngilizce'yi anadili olarak konuşanların kültürlerini ve/veya diğer kültürleri tanımak için İngilizce TV programlarını, filmleri veya internet sitelerini takip ederim.	1 2 3 4 5
26.	İngiliz dili kültürleriyle ve/veya diğer kültürlerle karşılaşacağım boş zaman aktiviteleri seçerim.	1 2 3 4 5
27.	İngilizce aracılığıyla, İngilizce konuşanların kültürleri ve/veya diğer kültürler hakkında neler öğrenmek istediğimi planlarım.	1 2 3 4 5
28.	Akranlarımla İngilizce pratik yaparım.	1 2 3 4 5
29.	İngilizce aracılığıyla, kendi kültürüm ve İngilizceyi anadili olarak konuşanların kültürleri ve/veya diğer kültürler arasındaki benzerlik ve farklılıkları araştırırım.	1 2 3 4 5
30.	İngiliz dili kültürlerini tanımak bu dili öğrenmeme yardımcı olur.	1 2 3 4 5
31.	İngilizce sohbetler başlatırım.	1 2 3 4 5



32.	Eğer doğrularını bilmiyorsam, İngilizce yeni kelimeler uydururum.	1	2	3	4	5
33.	İngilizcede oldukça ileri seviyede olan kişilerle konuştuğumda, onların kültürlerine aşina olmanın önemli olduğunu düşünürüm.	1	2	3	4	5
34.	Hata yapmaktan korktuğum zamanlarda bile İngilizce konuşmak için kendimi cesaretlendiririm.	1	2	3	4	5
35.	Sınavlara iyi hazırlanırım.	1	2	3	4	5
36.	Derslerde dikkat dağıtıcı davranışlarda bulunurum.	1	2	3	4	5
37.	İşlenen konuları tekrar ederim.	1	2	3	4	5
38.	Verilen ev ödevlerini zamanında yaparım.	1	2	3	4	5
39.	Bir sonraki dersimde işlenecek konuyu gözden geçiririm.	1	2	3	4	5
40.	Öğretmenimi dikkatli bir şekilde dinlerim.	1	2	3	4	5
41.	Ödev verilme bile çeşitli kaynaklardan pratik yaparım.	1	2	3	4	5
42.	Sınavlarda kopya çekerim.	1	2	3	4	5
43.	Yabancı dilde ders dışı etkinlikler (örn. kitap okumak, film izlemek, yabancılarla konuşmak, vb.) yaparım.	1	2	3	4	5
44.	Verilen ev ödevlerini zamanında teslim ederim.	1	2	3	4	5
45.	Çalışmalarım ile ilgili düzeltme alırsam, verilen çalışmadaki eksiklikleri tamamlarım.	1	2	3	4	5
46.	Sınıf arkadaşlarımdan derse yaptıkları katkıları dikkatli bir şekilde dinlerim.	1	2	3	4	5
47.	Yabancı dil becerimi nasıl geliştirebileceğim konusunda öğretmenime ya da başka uzmanlara danışırım.	1	2	3	4	5
48.	Ödev kopyacılığı yaparım.	1	2	3	4	5
49.	Verildiği takdirde ek ödevler yapmak için gönüllü olurum.	1	2	3	4	5
50.	Verilen sınıf içi çalışmalarını yaparım.	1	2	3	4	5
51.	Ders sırasında yalnızca derse odaklanırım.	1	2	3	4	5
52.	Kendimi yurtdışında yaşarken ve İngilizce konuşurken hayal edebiliyorum.	1	2	3	4	5
53.	Kendimi yurtdışında yaşarken ve oradakilerle iletişim kurmak için etkili bir şekilde İngilizce konuşurken hayal edebiliyorum.	1	2	3	4	5
54.	Yabancılarla İngilizce konuştuğum bir durum hayal edebiliyorum.	1	2	3	4	5
55.	Kendimi uluslararası arkadaşlarımla İngilizce konuşurken hayal edebiliyorum.	1	2	3	4	5
56.	Kendimi İngilizce konuşabilen birisi olarak hayal ederim.	1	2	3	4	5
57.	Kendimi ana dili İngilizce olan biriymişim gibi İngilizce konuşurken hayal edebiliyorum.	1	2	3	4	5

58.	Ne zaman ileriki kariyerimi düşünsem, kendimi İngilizce kullanırken hayal ederim.	1	2	3	4	5
59.	Gelecekte yapmak istediğim şeyler İngilizceyi kullanmamı gerektiriyor.	1	2	3	4	5
60.	Kendimi bütün derslerin İngilizce olarak öğretildiği bir okulda/üniversitede okurken hayal edebiliyorum.	1	2	3	4	5
61.	Kendimi İngilizce e-mailleri akıcı bir şekilde yazarken hayal edebiliyorum.	1	2	3	4	5
62.	Birisi bana ilginç bir yerden bahsettiğinde, orada olmanın nasıl olacağını hayal ederim.	1	2	3	4	5
63.	Bazen hayallere dalıp giderim.	1	2	3	4	5
64.	Endişeli hissettiğim zamanlarda, beni mutlu eden şeyleri hayalimde canlandırırım.	1	2	3	4	5
65.	İlginç bir hikaye okuduğumda, olayları ve karakterleri hayalimde canlandırırım.	1	2	3	4	5
66.	Sorunlarla karşılaştığımda, kendimi güzel bir yerde hayal ederim.	1	2	3	4	5
67.	İngilizce anlatılan hikâyeleri anlayabilir misiniz?	1	2	3	4	5
68.	Kendi başınıza İngilizce okuma ödevini bitirebilir misiniz?	1	2	3	4	5
69.	İngilizce TV programlarını anlayabilir misiniz?	1	2	3	4	5
70.	Okulunuzu İngilizce tanıtabilir misiniz?	1	2	3	4	5
71.	İngilizce günlük tutabilir misiniz?	1	2	3	4	5
72.	Okulunuzdan evinize giden yolu İngilizce tarif edebilir misiniz?	1	2	3	4	5
73.	Öğretmeniniz tarafından verilen İngilizce kompozisyon yazma ödevlerini yerine getirebilir misiniz?	1	2	3	4	5
74.	İngilizce hikaye anlatabilir misiniz?	1	2	3	4	5
75.	İngilizce konuşan ülkelerde yayınlanan radyo programlarını anlayabilir misiniz?	1	2	3	4	5
76.	Türkiye’de yapılan İngilizce televizyon programlarını anlayabilir misiniz?	1	2	3	4	5
77.	Sınıf arkadaşınıza İngilizce mesaj bırakabilir misiniz?	1	2	3	4	5
78.	İngilizce makale okuduğunuzda, bilmediğiniz kelimelerin anlamını tahmin edebilir misiniz?	1	2	3	4	5
79.	Yeni öğrendiğiniz kelimeleri kullanarak cümle yazabilir misiniz?	1	2	3	4	5
80.	İngilizce e-posta yazabilir misiniz?	1	2	3	4	5
81.	Öğretmeniniz okul yaşamıyla ilgili İngilizce kaydedilmiş bir konuşma kaydı verirse anlayabilir misiniz?	1	2	3	4	5
82.	İnternetteki İngilizce haber okuduğunuzda anlayabilir misiniz?	1	2	3	4	5
83.	Öğretmenlerinize İngilizce soru sorabilir misiniz?	1	2	3	4	5
84.	İngilizce deyimler kullanarak cümle yazabilir misiniz?	1	2	3	4	5

85.	İngilizce öğretmeninizi İngilizce tanıtabilir misiniz?	1	2	3	4	5
86.	Hepinizin ilgilendiği konularda sınıf arkadaşlarınızla İngilizce tartışabilir misiniz?	1	2	3	4	5
87.	İngilizce kısa romanları okuyabilir misiniz?	1	2	3	4	5
88.	İngilizce filmleri Türkçe altyazısız anlayabilir misiniz?	1	2	3	4	5
89.	Öğretmenlerinizin sorularını İngilizce cevaplayabilir misiniz?	1	2	3	4	5
90.	İngilizce şarkıları anlayabilir misiniz?	1	2	3	4	5
91.	İngilizce gazeteleri okuyabilir misiniz?	1	2	3	4	5
92.	İngilizceden İngilizceye olan bir sözlük kullanarak bilmediğiniz bir kelimenin anlamını bulabilir misiniz?	1	2	3	4	5
93.	İngilizce rakamları söylendiğinde anlayabilir misiniz?	1	2	3	4	5
94.	İnternette İngilizce haber yayınlayabilir misiniz?	1	2	3	4	5
95.	Türk kültürü hakkında yazılmış İngilizce makaleleri anlayabilir misiniz?	1	2	3	4	5
96.	Kendinizi İngilizce tanıtabilir misiniz?	1	2	3	4	5
97.	İngilizce öğretmeniniz hakkında İngilizce bir kompozisyon yazabilir misiniz?	1	2	3	4	5
98.	İngilizce kitabınızdaki yeni konuları okuduğunuzda anlayabilir misiniz?	1	2	3	4	5

**APPENDIX-C: Survey Instruments of Main Study in English**

**DMC Disposition Questionnaire (Muir, 2016)**

**Understanding long-term motivation**

**Before beginning, please choose one of the below two options:**

- I am under 16
- I am 16 or over

We find accounts on the internet of people being totally absorbed in **VERY INTENSE PROJECTS** which motivate them for weeks or even months at a time.

These people say things like:

- “I think about this project day and night – I feel like it’s taken over my life!”
- “I’m amazed I’ve been able to stay so focused for so long, I’m so enjoying it that putting in all the work feels easy!”
- “I never thought I could achieve so much!”
- “My friends can definitely see that something special is happening to me, they say they’ve never seen me so motivated!”
- “I wish I could experience this type of motivation while working towards all my goals!”




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**Please answer the following questions by marking the appropriate answer**

**About your intense motivational project**

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
When looking back now, I have very good memories of this time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
During this time I was able to work more productively than I usually can	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I surprised myself with how much I was able to do	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Many times it felt like a real struggle to keep going	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This experience helped me to achieve all I had wanted to and more	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think something special happened to me during this experience - it was an amazing time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**A little more about your intensive project experience...**

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
At the time, this project became a central part of my life	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The people around me could see that I was experiencing something special	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It didn't feel like hard work at the time - I was just caught up in the flow!	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I remember thinking about my goal all the time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often imagined myself achieving my final goal	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
It was a really enjoyable experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Self-Regulated Foreign Language Learning Strategy Questionnaire (Srfllsq) (Habok and Magyar, 2018)**

When I learn English, ...

**Metacognitive**

1. I think of the relationships between what I already know and new things I learn in English.
2. I first skim an English passage, then go back and read carefully.
3. I look for opportunities to read as much as possible in English.
4. I write notes, messages, letters, or reports in English.
5. I plan my schedule so I will have enough time to study English.
6. I pay attention when someone is speaking English.
7. I make summaries of information that I hear or read in English.
8. I try to find out how to be a better learner of English.

**Cognitive**

9. I connect the sound of a new English word and an image or picture of the word to help me remember the word.
10. I use the English words I know in different ways.
11. I find the meaning of an English word by dividing it into parts that I understand.
12. I use new English words in a sentence so I can remember them.
13. I try to find patterns (grammar) in English.
14. I try not to translate word for word.

**Meta-affective**

15. I notice if I am tense or nervous when I am studying or using English.
16. I encourage myself as I learn English so that I can learn what I would like.
17. I read in English as a leisure-time activity.
18. I organise my English language learning so that I always enjoy doing it.
19. I plan my English language learning so that I can perform better.
20. I have more success learning English when I feel like doing it.
21. I give myself a reward or treat when I do well in English.
22. I try to relax whenever I feel afraid of using English.

**The Foreign Language Learning Effort Scale (FLLES) (Karabiyik and Mirici, 2018)**

1. I prepare well for my foreign language exams.
2. I engage in disruptive behaviors in classes.
3. I review the topics covered in my foreign language class.
4. I do my homework on time.
5. I review the topics to be covered in my class.
6. I attentively listen to my instructor.
7. Even if I am not given homework assignment I practice from various sources.
8. I cheat on exams.
9. I engage in foreign language mediums in out-of-class activities (e.g. read books, watch movies, speak to foreigners, etc.)
10. I submit my homework on time.
11. I revise my assignments if I receive any corrections.
12. I attentively listen to the contributions made by my peers.
13. I consult my foreign language instructor or other experts for advice on how to improve my English.
14. I plagiarize my homework assignments.
15. If possible, I volunteer for extra homework assignments.

16. I carry out the assigned in-class tasks.
17. I concentrate solely on the lesson in my classes.

**Imaginative capacity Instrument (Kim & Kim, 2014)**

1. When someone tells me about an interesting place, I imagine what it would be like to be there.
2. I get drifted away by imagination.
3. When I feel distressed, I imagine things that make me feel happy.
4. When I read an interesting story, I imagine its events and characters.
5. I imagine being in a good place when running into problems.

**Future L2 self-guides Instrument (Taguchi et al., 2009) - Ideal L2 self**

1. I can imagine myself living abroad and having a discussion in English.
2. I can imagine myself living abroad and using English effectively for communicating with the locals.
3. I can imagine a situation where I am speaking English with foreigners.
4. I can imagine myself speaking English with international friends or colleagues.
5. I imagine myself as someone who is able to speak English.
6. I can imagine myself speaking English as if I were a native speaker of English.
7. Whenever I think of my future career, I imagine myself using English.
8. The things I want to do in the future require me to use English.
9. I can imagine myself studying in a university where all my courses are taught in English.
10. I can imagine myself writing English e-mails fluently.



## APPENDIX-D: Survey Instruments of Main Study in Turkish

Değerli Öğrenciler,

Bu çalışmanın amacı İngilizceyi yabancı dil olarak gören hazırlık sınıfı üniversite öğrencilerinin hedefli motivasyon akımlarını, öz düzenleme becerileri kullanımlarını ve bu kullanımların hedefli motivasyon akımları ile ilişkilerini ortaya çıkarmaktır.

Anket 20 dakikadan fazla sürmeyecektir ve vereceğiniz cevaplar öğrencilerin İngilizce öğrenirken neden ve nasıl uzun vadeli motivasyona sahip olduğunu anlamamız açısından çok önemli olduğu için dikkatlice ve gerçekçi bir şekilde doldurmaya gayret ediniz!

Ölçekte yer alan ifadeleri ne ölçüde karşıladığınızı **1 ile 5 arasındaki** rakamlardan birini daire içine alarak belirtiniz.

**ÖNEMLİP:** Verilen ifadeler için herhangi bir doğru ya da yanlış cevap yoktur. Bu yüzden, sadece sizi en iyi şekilde anlatan ifadeyi düşünerek puanlayınız. Cevaplarınız araştırmacı dışında hiç kimse tarafından görülmeyecek, değerlendirilmeyecektir. **Lütfen hiçbir soruyu bos bırakmayınız.**

İlginiz için teşekkürler!

### **BÖLÜM I: Demografik Bilgiler**

1. **Cinsiyetiniz:** Kız ( ) Erkek ( )
2. **Yaşınız:** .....
3. **Bölümünüz:** .....

### **BÖLÜM II: Uzun süreli motivasyonu anlama hakkında**

**Lütfen aşağıdaki tabloda yer alan soruları cevaplamaadan önce aşağıdaki açıklamayı dikkatlice okuyunuz.**

Kendilerini haftalarca ya da aylarca motive edebilen çok yoğun projeler ya da görevlere tüm dikkatlerini veren insanların hikayelerini internette bulabiliyoruz.

Bu insanlar şu gibi şeylerden bahsetmektedirler:

- “Bu projeyi gece gündüz düşünüyorum- ve onun tüm hayatımı ele geçirdiğini düşünüyorum!”
- “Bu kadar uzun süre odaklanmış kalabildiğime hayret ediyorum, o kadar çok eğleniyorum ki onunla, bu kadar çok çalışmak hiç zor gelmiyor!”
- “Hiç bu kadar başarı elde edebileceğimi düşünmemiştim!”
- “Arkadaşlarım bendeki değişikliği açıkça fark edebiliyorlar, ve beni bu zamana kadar hiç bu kadar motive olmuş görmediklerini söylüyorlar!”
- “Keşke bütün hedeflerim için çalışırken böyle motive olsam!”

4. **Ne sıklıkla sizce böylesine yoğun bir motivasyon türünü yaşadığınızı aşağıdaki**

**seçeneklerden birine çarpı işareti (X) koyarak belirtiniz?**

- ( ) Bu tür bir motivasyonu HİÇ yaşamadım. **(Cevabınız bu seçenekse, lütfen bölüm IV' den devam ediniz.)**
- ( ) Bu tür bir motivasyonu SADECE BİR KEZ yaşadım, fakat yukarıda anlatıldığı kadar yoğun değildi.
- ( ) Bu tür bir motivasyonu DEFALARCA yaşadım, fakat yukarıda anlatıldığı kadar yoğun değildi.
- ( ) Bu tür bir motivasyonu SADECE BİR KEZ yaşadım, yukarıda anlatılan yoğunluğa benzerdi.
- ( ) Bu tür bir motivasyonu DEFALARCA yaşadım, yukarıda anlatılan yoğunluğa benzerdi.

**BÖLÜM III: Yoğun motivasyon deneyimi hakkında**

**Aşağıdaki ölçekte yer alan ifadeleri ne ölçüde karşıladığınızı 1 ile 5 arasındaki rakamlardan birini işaretleyerek belirtiniz.**

1 = Hiç Katılmıyorum 2 = Katılmıyorum 3 = Kararsızım 4 = Katılıyorum 5 = Kesinlikle Katılıyorum					
1. Geriye baktığımda, bu tür bir deneyimi yaşadığım zamana dair çok iyi izlenimim var.	1	2	3	4	5
2. Bu süreç boyunca normalden çok daha verimli çalışabiliyordum.	1	2	3	4	5
3. Bu kadarını yapabildiğime ben bile şaşırımdım.	1	2	3	4	5
4. Bu deneyim esnasında çoğu zaman aynı motivasyonu sürdürürebilmekte zorlandım.	1	2	3	4	5
5. Bu deneyim bana hedefimle ilgili tüm yapmak istediklerimde ve hatta daha fazlasını başarmamda yardım etti.	1	2	3	4	5
6. Bu deneyim esnasında bana alışılmadık bir şeylerin olduğunu düşünüyorum- gerçekten büyüleyici bir zamandı.	1	2	3	4	5

7. Bu yaşadığım deneyim, o esnada benim hayatımın merkezinde yer aldı.	1	2	3	4	5
8. Beni tanıyanlar benim alışılmadık bir şeyler deneyimlediğimi fark ediyorlardı.	1	2	3	4	5
9. Bu yaşadığım deneyim boyunca hiç zorlanmadım-Kendimi sürecin akışına bırakmıştım.	1	2	3	4	5
10. Bu yaşadığım deneyim boyunca hedefim hiç aklımdan çıkmıyordu.	1	2	3	4	5
11. Kendimi hep nihai hedefime ulaşmış hayal ediyordum.	1	2	3	4	5
12. Gerçekten hoş bir deneyimdi.	1	2	3	4	5

#### **BÖLÜM IV:**

#### **Öz-Düzenleme Becerileri, Dil Öğrenme Çabası, İdeal Yabancı Dil Benliği, Zorunlu Yabancı Dil Benliği, Görselleştirme Becerisi ve Öz-Yeterlilik Ölçekleri**

		Hiçbir zaman	Nadiren	Bazen	Sık sık	Her zaman
1.	İngilizcede bildiğim şeylerle yeni öğrendiğim şeyler arasındaki ilişkileri düşünürüm.	1	2	3	4	5
2.	Bir İngilizce okuma parçasını önce gözden geçirir sonrasında geri dönüp dikkatlice okurum.	1	2	3	4	5
3.	Mümkün olduğunca fazla İngilizce okuma yapmak için fırsat ararım.	1	2	3	4	5
4.	İngilizce notlar, mesajlar, mektuplar veya raporlar yazarım.	1	2	3	4	5
5.	Programımı önceden planlarım, böylece İngilizce çalışmak için yeterli zamanım olur.	1	2	3	4	5
6.	Biri İngilizce konuşurken dikkat kesilirim.	1	2	3	4	5
7.	İngilizce duyduğum veya okuduğum bilgilerin özetlerini çıkarırım.	1	2	3	4	5
8.	Nasıl daha iyi bir İngilizce öğrencisi olacağımı keşfetmeye çalışırım.	1	2	3	4	5
9.	Bir kelimeyi hatırlamama yardımcı olması için, bu yeni kelimenin	1	2	3	4	5

	okunuşu ile görüntüsünü veya resmini ilişkilendiririm.	
10.	Bildiğim İngilizce kelimeleri farklı şekillerde kullanırım.	1 2 3 4 5
11.	İngilizce bir kelimenin anlamını, kelimeyi anlayabileceğim şekilde parçalara bölerek bulurum.	1 2 3 4 5
12.	Yeni öğrendiğim İngilizce kelimeleri cümle içinde kullanırım, böylece onları hatırlayabilirim.	1 2 3 4 5
13.	İngilizcede kalıplar (dilbilgisi kuralları) bulmaya çalışırım.	1 2 3 4 5
14.	Kelimesi kelimesine çeviri yapmamaya çalışırım.	1 2 3 4 5
15.	İngilizce çalışırken veya kullanırken gergin veya kaygılı isem bunu fark ederim.	1 2 3 4 5
16.	İngilizce öğrenirken kendimi cesaretlendiririm, böylece öğrenmek istediğim şeyleri öğrenebilirim.	1 2 3 4 5
17.	Boş zaman aktivitesi olarak İngilizce okumalar yaparım.	1 2 3 4 5
18.	İngilizce öğrenme sürecimi düzenlerim, böylece daima öğrenmekten keyif alırım.	1 2 3 4 5
19.	İngilizce öğrenme sürecimi planlarım, böylece daha iyi performans gösterebilirim.	1 2 3 4 5
20.	Gerçekten istediğim zaman, İngilizce öğrenmede daha başarılı olurum.	1 2 3 4 5
21.	İngilizcede iyi bir şey yaptığımda kendime ödül veririm.	1 2 3 4 5
22.	Ne zaman İngilizce kullanmaktan korksam rahatlamaya çalışırım.	1 2 3 4 5
23.	Sınavlara iyi hazırlanırım.	1 2 3 4 5
24.	Derslerde dikkat dağıtıcı davranışlarda bulunurum.	1 2 3 4 5
25.	İşlenen konuları tekrar ederim.	1 2 3 4 5
26.	Verilen ev ödevlerini zamanında yaparım.	1 2 3 4 5
27.	Bir sonraki dersimde işlenecek konuyu gözden geçiririm.	1 2 3 4 5
28.	Öğretmenimi dikkatli bir şekilde dinlerim.	1 2 3 4 5
29.	Ödev verilmese bile çeşitli kaynaklardan pratik yaparım.	1 2 3 4 5
30.	Sınavlarda kopya çekerim.	1 2 3 4 5
31.	Yabancı dilde ders dışı etkinlikler (örn. kitap okumak, film izlemek, yabancılarla konuşmak, vb.) yaparım.	1 2 3 4 5

32.	Verilen ev ödevlerini zamanında teslim ederim.	1	2	3	4	5
33.	Çalışmalarım ile ilgili düzeltme alırsam, verilen çalışmadaki eksiklikleri tamamlarım.	1	2	3	4	5
34.	Sınıf arkadaşlarımda derse yaptıkları katkıları dikkatli bir şekilde dinlerim.	1	2	3	4	5
35.	Yabancı dil becerimi nasıl geliştirebileceğim konusunda öğretmenime ya da başka uzmanlara danışırım.	1	2	3	4	5
36.	Ödev kopyacılığı yaparım.	1	2	3	4	5
37.	Verildiği takdirde ek ödevler yapmak için gönüllü olurum.	1	2	3	4	5
38.	Verilen sınıf içi çalışmalarını yaparım.	1	2	3	4	5
39.	Ders sırasında yalnızca derse odaklanırım.	1	2	3	4	5
40.	Kendimi yurtdışında yaşarken ve İngilizce konuşurken hayal edebiliyorum.	1	2	3	4	5
41.	Kendimi yurtdışında yaşarken ve oradakilerle iletişim kurmak için etkili bir şekilde İngilizce konuşurken hayal edebiliyorum.	1	2	3	4	5
42.	Yabancılarla İngilizce konuştuğum bir durum hayal edebiliyorum.	1	2	3	4	5
43.	Kendimi uluslararası arkadaşlarımla İngilizce konuşurken hayal edebiliyorum.	1	2	3	4	5
44.	Kendimi İngilizce konuşabilen birisi olarak hayal ederim.	1	2	3	4	5
45.	Kendimi ana dili İngilizce olan biriymişim gibi İngilizce konuşurken hayal edebiliyorum.	1	2	3	4	5
46.	Ne zaman ileriki kariyerimi düşünsem, kendimi İngilizce kullanırken hayal ederim.	1	2	3	4	5
47.	Gelecekte yapmak istediğim şeyler İngilizceyi kullanmamı gerektiriyor.	1	2	3	4	5
48.	Kendimi bütün derslerin İngilizce olarak öğretildiği bir okulda/üniversitede okurken hayal edebiliyorum.	1	2	3	4	5
49.	Kendimi İngilizce e-mailleri akıcı bir şekilde yazarken hayal edebiliyorum.	1	2	3	4	5
50.	Birisi bana ilginç bir yerden bahsettiğinde, orada olmanın nasıl olacağını hayal ederim.	1	2	3	4	5
51.	Bazen hayallere dalıp giderim.	1	2	3	4	5
52.	Endişeli hissettiğim zamanlarda, beni mutlu eden şeyleri hayalimde	1	2	3	4	5

	canlandırırım.	
53.	İlginç bir hikaye okuduğumda, olayları ve karakterleri hayalimde canlandırırım.	1 2 3 4 5
54.	Sorunlarla karşılaştığımda, kendimi güzel bir yerde hayal ederim.	1 2 3 4 5

### APPENDIX-E: Focus Group Interview Guide

Please write the name of the student here:.....	YES	PARTIALLY	NO	I don't know
1. Does he/she have a clear goal which is significant for him/her?				
2. Does he/she value that goal for his/her future life or career?				
3. Does he/she imagine himself/herself achieving that goal in the future?				
4. Is he/she highly engaged in English language learning process?				
5. Does he/she follow some routines to learn English?				
6. Is he/she careful in his/her assignments?				
7. Does he/she check his/her progress regularly?				
8. Does he/she ask for your feedback or value your feedback?				
9. Does he/she ask for his/her peers' feedback or value their feedback?				
10. Does he/she feel positive during the language learning period?				
11. Does he/she enjoy that process?				
12. Does he/she experience fluctuations in his/her feelings? (For example, does he/she get easily demoralized?)				
13. Is he/she able to overcome the emotional fluctuations in a positive way?				
14. Can he/she stay focused for a long time on English learning?				
15. Can you observe any positive outcomes of his/her great effort and investment in the language learning process?				
16. Is learning English a priority of his/her present life?				

**APPENDIX-F: One-to-one Student Interview Guide in English**

1. (Warm up) How are you doing?
  - 1.1. Can you briefly introduce yourself to me?
2. Demographic information
  - 2.1. How old are you?
  - 2.2. What is your department?
  - 2.3. When did you start studying English?
  - 2.4. Where (in which country) have you been learning English so far?
3. What do you think about learning English?
  - 3.1. What is the place of learning English in your life? What does it mean to you?
4. Can you tell me about your motivational intensity?
  - 4.1. (Personalized question-PQ) Do you remember when it started? Can you please explain it?
  - 4.2. (PQ) Do you remember what triggered your motivation? Can you tell me about it?
  - 4.3. (PQ) Do people realize your intense motivation and comment on it? What do they tell you?
5. How do you feel about the English language learning process at university?
  - 5.1. Do you enjoy studying English? What do you enjoy most? What do you enjoy least?
  - 5.2. What are the reasons behind your positive/negative feelings?
  - 5.3. Do you see any changes in your feelings during the language learning process?
  - 5.4. (If yes) Especially when or under what circumstances do you experience these emotional changes?
6. What is your purpose/goal in learning English right now? Can you explain it?
  - 6.1. (PQ) Since when do you have that goal?
  - 6.2. (PQ) Why is that goal/purpose valuable for you?
7. What do you do to reach your purpose (If you are doing anything special)?
  - 7.1. (PQ) How do you study?
  - 7.2. (PQ) How much time do you spend on that?
  - 7.3. (PQ) How often do you do that?
  - 7.4. (PQ) How do you feel when you do them? How do you feel when you don't do them?
8. How much effort do you think you spend on learning English?



- 8.1. Does your effort lead to positive outcomes?
9. What do you think about the distance between your purpose and your current state of English proficiency?
  - 9.1. How close do you think you are to your end goal?
  - 9.2. How do you check your progress?
  - 9.3. Do you get any feedback or comment from the people around you (e.g. your peers, teachers, or family) about your progress?
  - 9.4. (PQ) What do they tell you about it?
  - 9.5. (PQ) How do their feedback or comments influence your motivation?
10. Please tell me a day of yours during the English language learning process.
11. Motigraph
  - 11.1. Can you please mark your motivational intensity, effort, and affective state on the motigraph?
  - 11.2. Can you please explain your motigraph? What are the factors that increase or decrease your motivation, effort, and positive emotions during the language learning process?

## APPENDIX-G: One-to-one Student Interview Guide in Turkish

1. (Isınma sorusu) Nasılsın?
  - 1.1. Kendini kısaca tanıtır mısın?
2. Gerekli Bilgiler
  - 2.1. Kaç yaşındasın?
  - 2.2. Bölümün nedir?
  - 2.3. İngilizce öğrenmeye ne zaman başladın?
  - 2.4. Okul hayatının hepsini Türkiye’de mi geçirdin?
3. İngilizce öğrenmek hakkında ne düşünüyorsun?
  - 3.1. İngilizce öğrenmenin senin hayatındaki yeri nedir? İngilizce öğrenmek senin için ne ifade ediyor?
4. (İngilizce öğrenme konusundaki) motivasyon yoğunluğundan/seviyenden bahsedebilir misin?
  - 4.1. (Kişiyeye özgü soru) Bu yoğun motivasyon durumu ne zaman başladı? Açıklayabilir misin?
  - 4.2. (Kişiyeye özgü soru) Motivasyonunu tetikleyen şey neydi? Anlatılabilir misin?
  - 4.3. (Kişiyeye özgü soru) Çevrendeki insanlar yoğun motivasyon durumunu fark edip yorumda bulunuyorlar mı? Neler söylüyorlar?
5. Üniversitedeki İngilizce öğrenme sürecin ile ilgili neler hissediyorsun?
  - 5.1. İngilizce öğrenmekten keyif alıyor musun? Bu süreçte nelerden daha çok keyif alıyorsun? Nelerden almıyorsun?
  - 5.2. Bu olumlu/olumsuz hislerinin sebeplerini biraz anlatabilir misin?
  - 5.3. Bu hislerinde zaman zaman değişiklikler/dalgalanmalar fark ediyor musun?
  - 5.4. (Cevabın evet ise) Özellikle ne zaman yada hangi koşullar altındayken bu duygusal değişimleri gözlemliyorsun?
6. Şu anda İngilizce öğrenmek için herhangi bir amacın var mı? Varsa açıklayabilir misin?
  - 6.1. (Kişiyeye özgü soru) Ne zaman beri böyle bir amaca sahipsin?
  - 6.2. (Kişiyeye özgü soru) Bu amaç/hedef senin için neden önemli?
7. Bu amaca/hedefe ulaşmak için neler yapıyorsun?
  - 7.1. (Kişiyeye özgü soru) Nasıl çalışıyorsun?
  - 7.2. (Kişiyeye özgü soru) Bunun için ne kadar zaman ayırıyorsun?
  - 7.3. (Kişiyeye özgü soru) Bunu ne sıklıkla yapıyorsun?
  - 7.4. (Kişiyeye özgü soru) Yaptığın zaman neler hissediyorsun? Yapmadığın zaman neler hissediyorsun?
8. İngilizce öğrenmek için ne kadar çaba sarf ediyorsun?

- 8.1. Bu çabaların sonuçlar verdi mi/veriyor mu?
9. İngilizce konusundaki hedefin ile şu anki dil seviyen arasında nasıl bir mesafe görüyorsun?
  - 9.1. Hedefine ne derece yaklaştığını düşünüyorsun?
  - 9.2. İlerlemeni ve hedefine ne derece yaklaştığını nasıl kontrol ediyorsun?
  - 9.3. İlerlemen konusunda etrafındaki kişilerden (arkadaşlarından, öğretmenlerinde, ailenden) geribildirim veya yorumlar alıyor musun?
  - 9.4. (Kişiyeye özgü soru) Ne gibi yorumlar/geribildirimler yapıyorlar?
  - 9.5. (Kişiyeye özgü soru) Bu yorumlar/ geribildirimler senin motivasyonunu nasıl etkiliyor?
10. Bana İngilizce öğrenme sürecindeki bir gününü anlatır mısın?
11. Motivasyon grafiği çizme
  - 11.1. Şu anki İngilizce öğrenme sürecine dair motivasyonunu, çabanı ve duygu durumunu gösteren motivasyon grafiğini işaretleyebilir misin?
  - 11.2. Motivasyon grafiğini açıklayabilir misin? İngilizce öğrenirken motivasyonunun azalmasına ve artmasına etki eden faktörler nelerdir?

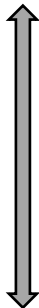
**APPENDIX-H: Motigraph for the 1<sup>st</sup> Interview- English Version**

Name-Surname: \_\_\_\_\_ Class: \_\_\_\_\_

**MOTIGRAPH**

Please tick the most appropriate score for yourself for each column in the table below.

About English language learning,

		Your motivational intensity right now	Your effort right now	Your emotional state right now
<p style="text-align: center;">Very high/positive</p>  <p style="text-align: center;">Very low/negative</p>	5			
	4			
	3			
	2			
	1			
	0			
	-1			
	-2			
	-3			
	-4			
	-5			

## APPENDIX-I: Motigraph for the 1<sup>st</sup> Interview - Turkish Version

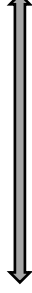
Ad-Soyad: \_\_\_\_\_

Sınıf: \_\_\_\_\_

### MOTİVASYON GRAFİĞİ

Lütfen aşağıdaki tabloda herbir sütun için size en uygun olan değeri işaretleyiniz.

İngilizce öğrenme hususunda,

		Şuanki motivasyon yoğunluğunuz	Şuanki çaba harcama durumunuz	Şuanki duygu durumunuz
<p>Çok yüksek/olumlu</p>  <p>Çok düşük/olumsuz</p>	5			
	4			
	3			
	2			
	1			
	0			
	-1			
	-2			
	-3			
	-4			
	-5			

## APPENDIX-J: Biweekly Language Learning Diary Prompts- English Version

### LANGUAGE LEARNING DIARIES 1

Can you please answer the following questions about last week and this week considering your in-class and out-of-class language learning activities/studies and send them to the following e-mail address?

Thank you...

#### WEEKS 1 & 2

1. How do you see your **motivational intensity** related to your language learning processes of last week and this week? Did anything **increase** your motivation? What was it/ were they? Can you explain?

<b>Last week (Week 1):</b>
<b>This week (Week 2):</b>

2. Did anything **decrease** your motivation last week and this week? What was it/ were they? Can you explain?

<b>Last week (Week 1):</b>
<b>This week (Week 2):</b>

3. Can you explain **your feelings** related to the language learning processes of last week and this week? How did you feel? Did you do anything to change your feelings or keep them under control? If yes, what did you do?

**Last week (Week 1):**

**This week (Week 2):**

4. Do you have any **goals to reach** at the end of the English learning process at university? If yes, would you please **explain your goal clearly**?

5. Do you have any **methods and/or techniques for learning English** inside or outside the classroom? If yes, what are these? How useful are they? Why? What do you think about their effects?

6. Which of these methods and/or techniques did you use last week and this week? For what purposes did you use them? How effective were they?

**Last week (Week 1):**

<b>This week (Week 2):</b>
----------------------------

7. Do you have any particular language skills that you plan to develop this semester? (Reading, writing, listening, speaking, vocabulary, etc.). If yes, how and in what ways (via what methods/techniques/practices) do you plan to do this?

8. Do you think that you can overcome the difficulties that you face in the English learning process? To what extent do you consider yourself efficacious in achieving this?

10. Is there anything you would like to add?

11. Can you please indicate **your motivational intensity, how much effort you put into English, and your emotional state** for weeks 1 and 2 on the motigraph?



**MOTIGRAPH 1**

Please tick the most appropriate score for yourself each week (5: very high/positive; -5: very low/negative).

<b>Motivational intensity</b>	<b>Week 1</b>	<b>Week 2</b>	<b>Effort</b>	<b>Week 1</b>	<b>Week 2</b>	<b>Emotional state</b>	<b>Week 1</b>	<b>Week 2</b>
5			5			5		
4			4			4		
3			3			3		
2			2			2		
1			1			1		
0			0			0		
-1			-1			-1		
-2			-2			-2		
-3			-3			-3		
-4			-4			-4		
-5			-5			-5		

**LANGUAGE LEARNING DIARIES 2**

Can you please answer the following questions about last week and this week considering your in-class and out-of-class language learning activities/studies and send them to the following e-mail address?

Thank you...

**WEEKS 3 & 4**

1. How do you see your **motivational intensity** related to your language learning processes of last week and this week? Did anything **increase** your motivation? What was it/ were they? Can you explain?

**Last week (Week 3):**

**This week (Week 4):**

2. Did anything **decrease** your motivation last week and this week? What was it/ were they? Can you explain?

**Last week (Week 3):**

**This week (Week 4):**

--

3. Can you explain **your feelings** related to the language learning processes of last week and this week? How did you feel? Did you experience any changes in your feelings compared to the previous two weeks? If yes, can you please **explain them clearly**?

<b>Last week (Week 3):</b>
<b>This week (Week 4):</b>

4. Do you think you made progress in language learning last week and this week? What kind of language learning activities or practices did you do in and out of the classroom during this period? How useful were they?

<b>Last week (Week 3):</b>
<b>This week (Week 4):</b>

5. Did you use your **methods and/or techniques** (that you mentioned in the previous diary) of learning English last week and this week? For what purposes did you use them? How useful were they? What do you think their effects are?

<b>Last week (Week 3):</b>
<b>This week (Week 4):</b>

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6. Did you use any **new methods and/or techniques** (different from the ones you mentioned in the previous diary) for learning English last week and this week? For what purposes did you use them? How useful were they? What do you think their effects are?

<b>Last week (Week 3):</b>
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<b>This week (Week 4):</b>
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7. Are there any language skills you've been focusing on last week and this week? (Reading, writing, listening, speaking, vocabulary, etc.). What did you do to improve them? Were they useful?

<b>Last week (Week 3):</b>
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<b>This week (Week 4):</b>
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8. Did you have any **difficulties or problems** in the language learning processes last week and this week? If yes, what were they? Did you get through them? What have you done for this purpose?

<b>Last week (Week 3):</b>
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<b>This week (Week 4):</b>
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9. Is there anything else you would like to add?

10. Can you please indicate **your motivational intensity, how much effort you put into English, and your emotional state** for weeks 3 and 4 on the motigraph?

### MOTIGRAPH 2

Please tick the most appropriate score for yourself each week (5: very high/positive; -5: very low/negative).

Motivational intensity	Week 3	Week 4	Effort	Week 3	Week 4	Emotional state	Week 3	Week 4
5			5			5		
4			4			4		
3			3			3		
2			2			2		
1			1			1		
0			0			0		
-1			-1			-1		
-2			-2			-2		
-3			-3			-3		
-4			-4			-4		
-5			-5			-5		

**LANGUAGE LEARNING DIARIES 3**

Can you please answer the following questions about last week and this week considering your in-class and out-of-class language learning activities/studies and send them to the following e-mail address?

Thank you...

**WEEKS 5 & 6**

1. How do you see your **motivational intensity** related to your language learning processes of last week and this week? Did anything **increase** your motivation? What was it/ were they? Can you explain?

**Last week (Week 5):**

**This week (Week 6):**

2. Did anything **decrease** your motivation last week and this week? What was it/ were they? Can you explain?

**Last week (Week 5):**

**This week (Week 6):**

3. Can you explain **your feelings** related to the language learning processes of last week and this week? How did you feel? Did you experience any changes in your feelings compared to the previous weeks? If yes, can you please **explain them clearly**?

**Last week (Week 5):**

**This week (Week 6):**

4. Do you think you made progress in language learning last week and this week? What kind of language learning activities or practices did you do in and out of the classroom during this period? How useful were they?

**Last week (Week 5):**

**This week (Week 6):**

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5. Did you use your **methods and/or techniques** (that you mentioned in the previous diaries) of learning English last week and this week? For what purposes did you use them? How useful were they? What do you think their effects are?

<b>Last week (Week 5):</b>
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<b>This week (Week 6):</b>
----------------------------

6. Did you use any **new methods and/or techniques** (different from the ones you mentioned in the previous diaries) for learning English last week and this week? For what purposes did you use them? How useful were they? What do you think their effects are?

<b>Last week (Week 5):</b>
----------------------------

<b>This week (Week 6):</b>
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7. Are there any language skills you've been focusing on last week and this week? (Reading, writing, listening, speaking, vocabulary, etc.). What did you do to improve them? Were they useful?

<b>Last week (Week 5):</b>
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<b>This week (Week 6):</b>

8. Did you have any **difficulties or problems** in the language learning processes last week and this week? If yes, what were they? Did you get through them? What have you done for this purpose?

<b>Last week (Week 5):</b>
<b>This week (Week 6):</b>

9. Is there anything else you would like to add?

10. Can you please indicate **your motivational intensity, how much effort you put in English, and your emotional state** for weeks 5 and 6 on the motigraph?

**MOTIGRAPH 3**

Please tick the most appropriate score for yourself each week (5: very high/positive; -5: very low/negative).

<b>Motivational intensity</b>	<b>Week 5</b>	<b>Week 6</b>	<b>Effort</b>	<b>Week 5</b>	<b>Week 6</b>	<b>Emotional state</b>	<b>Week 5</b>	<b>Week 6</b>
5			5			5		
4			4			4		
3			3			3		
2			2			2		
1			1			1		
0			0			0		
-1			-1			-1		
-2			-2			-2		
-3			-3			-3		
-4			-4			-4		
-5			-5			-5		

**LANGUAGE LEARNING DIARIES 4**

Can you please answer the following questions about last week and this week considering your in-class and out-of-class language learning activities/studies and send them to the following e-mail address?

Thank you...

**WEEKS 7 & 8**

1. How do you see your **motivational intensity** related to your language learning processes of last week and this week? Did anything **increase** your motivation? What was it/ were they? Can you explain?

**Last week (Week 7):**

**This week (Week 8):**

2. Did anything **decrease** your motivation last week and this week? What was it/ were they? Can you explain?

**Last week (Week 7):**

**This week (Week 8):**

3. Can you explain **your feelings** related to the language learning processes of last week and this week? How did you feel? Did you experience any changes in your feelings compared to the previous weeks? If yes, can you please **explain them clearly**?

**Last week (Week 7):**

**This week (Week 8):**

4. Do you think you made progress in language learning last week and this week? What kind of language learning activities or practices did you do in and out of the classroom during this period? How useful were they?

**Last week (Week 7):**

**This week (Week 8):**

--

5. Did you use your **methods and/or techniques** (that you mentioned in the previous diaries) of learning English last week and this week? For what purposes did you use them? How useful were they? What do you think their effects are?

<b>Last week (Week 7):</b>
<b>This week (Week 8):</b>

6. Did you use any **new methods and/or techniques** (different from the ones you mentioned in the previous diaries) for learning English last week and this week? For what purposes did you use them? How useful were they? What do you think their effects are?

<b>Last week (Week 7):</b>
<b>This week (Week 8):</b>

7. Are there any language skills you've been focusing on last week and this week? (Reading, writing, listening, speaking, vocabulary, etc.). What did you do to improve them? Were they useful?

<b>Last week (Week 7):</b>
----------------------------

<b>This week (Week 8):</b>

8. Did you have any **difficulties or problems** in the language learning processes of last week and this week? If yes, what were they? Did you get through them? What have you done for this purpose?

<b>Last week (Week 7):</b>
<b>This week (Week 8):</b>

9. How close do you think you got to your goal of learning English during this semester? Can you explain why? What influenced your coming closer to your goal or failing in it?

10. Is there anything else you would like to add?

11. Can you please indicate **your motivational intensity, how much effort you put in English, and your emotional state** for weeks 7 and 8 on the motigraph?

#### MOTIGRAPH 4

Please tick the most appropriate score for yourself each week (5: very high/positive; -5: very low/negative).

Motivational intensity	Week 7	Week 8	Effort	Week 7	Week 8	Emotional state	Week 7	Week 8
5			5			5		
4			4			4		
3			3			3		
2			2			2		
1			1			1		
0			0			0		
-1			-1			-1		
-2			-2			-2		
-3			-3			-3		
-4			-4			-4		
-5			-5			-5		

**APPENDIX-K: Biweekly Language Learning Diary Prompts- Turkish Version****DİL ÖĞRENME GÜNLÜKLERİ 1**

Lütfen aşağıdaki soruları geçen hafta ve bu haftaki **sınıf içi ve sınıf dışı** dil öğrenme aktivitelerini/çalışmalarını düşünerek cevaplayıp aşağıdaki mail adresine gönderebilir misin? Teşekkürler...

**1. & 2. HAFTALAR**

1. Geçen hafta ve bu haftaki dil öğrenme sürecin ile ilgili **motivasyon yoğunluğunu** nasıl değerlendirirsin? Motivasyonunu **artıran** şeyler oldu mu? Ne ya da neler oldu, açıklayabilir misin?

**Geçen hafta (1. Hafta):**

**Bu hafta (2. hafta):**

2. Geçen hafta ve bu haftaki dil öğrenme sürecinde motivasyonunu **azaltan** şeyler oldu mu? Ne ya da neler oldu, açıklayabilir misin?

**Geçen hafta (1. Hafta):**



**Bu hafta (2. hafta):**

3. Geçen hafta ve bu haftaki dil öğrenme sürecin ile ilgili **duygu durumunu** açıklayabilir misin? Neler hissettin? Hislerini değiştirmek veya kontrol altında tutmak için birşey yaptın mı? Yaptıysan ne ya da neler yaptın?

**Geçen hafta (1. Hafta):**

**Bu hafta (2. hafta):**

4. Üniversitede İngilizce öğrenme sürecinin sonunda ulaşmak istediğin bir **hedefin** var mı? Varsa hedefini **net bir şekilde** açıklar mısın?

5. Sınıf içinde ya da sınıf dışında İngilizce öğrenirken uyguladığın **yöntemlerin ve/veya tekniklerin** var mı? Varsa bunlar nelerdir? Bunlar ne kadar faydalı? Neden? Sence etkileri neler?

6. Geen hafta ve bu hafta bu yntem ve/veya tekniklerden hangilerini ne amala kullandın? Ne derece etkili oldular?

<b>Geen hafta (1. Hafta):</b>
<b>Bu hafta (2. hafta):</b>

7. Bu dnem zellikle geliřtirmeyi planladığın bir dil becerin var mı? (Okuma, yazma, dinleme, konuřma, kelime vb.). Varsa bunu nasıl ve ne gibi yntemlerle/tekniklerle/alıřmalarla yapmayı planlıyorsun?

8. İngilizce ğrenme srecinde zorluklarla karřılařtığında abalayarak stesinden gelebileceğini dřünüyor musun? Kendini bunu bařarma konusunda ne derece yeterli gryorsun?

10. Ekleme istediğin bařka birřey var mı?

11. Lütfen aşağıdaki motivasyon grafiğinde 1. ve 2. haftalar için **İngilizce öğrenme motivasyonu yoğunluğunu, ne kadar çaba harcadığını, ve duygu durumunu** işaretleyebilir misin?

### MOTİVASYON GRAFİĞİ 1

Lütfen aşağıdaki tablolarda her bir hafta için size en uygun olan değeri işaretleyiniz. (5: çok yüksek/olumlu; -5: çok düşük/olumsuz).

Motivasyon yoğunluğu	Hafta 1	Hafta 2	Çaba durumu	Hafta 1	Hafta 2	Duygu durumu	Hafta 1	Hafta 2
5			5			5		
4			4			4		
3			3			3		
2			2			2		
1			1			1		
0			0			0		
-1			-1			-1		
-2			-2			-2		
-3			-3			-3		
-4			-4			-4		
-5			-5			-5		

## DİL ÖĞRENME GÜNLÜKLERİ 2

Lütfen aşağıdaki soruları geçen hafta ve bu haftaki **sınıf içi ve sınıf dışı** dil öğrenme aktivitelerini/çalışmalarını düşünerek cevaplayıp aşağıdaki mail adresine gönderebilir misin? Teşekkürler...

### 3. & 4. HAFTALAR

1. Geçen hafta ve bu haftaki dil öğrenme sürecin ile ilgili **motivasyon yoğunluğunu** nasıl değerlendirirsin? Motivasyonunu **artıran** şeyler oldu mu? Ne ya da neler oldu, açıklayabilir misin?

<b>Geçen hafta (3. Hafta):</b>
<b>Bu hafta (4. hafta):</b>

2. Geçen hafta ve bu haftaki dil öğrenme sürecinde motivasyonunu **azaltan** şeyler oldu mu? Ne ya da neler oldu, açıklayabilir misin?

<b>Geçen hafta (3. Hafta):</b>
<b>Bu hafta (4. hafta):</b>

3. Geçen hafta ve bu haftaki dil öğrenme sürecin ile ilgili **duygu durumunu** açıklayabilir misin? Neler hissettin? İlk 2 haftayla karşılaştığında hislerinde değişiklikler oldu mu? Ne gibi değişiklikler oldu?

<b>Geçen hafta (3. Hafta):</b>
<b>Bu hafta (4. hafta):</b>

4. Geçen hafta ve bu hafta dil öğrenme açısından ilerleme kaydettiğini düşünüyor musun? Bu süreçte sınıf içinde ve dışında ne gibi dil öğrenme çalışmaları veya aktiviteleri yaptın? Bunlar ne kadar faydalı oldu?

<b>Geçen hafta (3. Hafta):</b>
<b>Bu hafta (4. hafta):</b>

5. (Bir önceki günlükte bahsettiğin) İngilizce öğrenirken uyguladığın yöntemlerini ve/veya tekniklerini geçen hafta ve bu hafta da kullandın mı? Hangi amaçlarla kullandın? Bunlar ne kadar faydalı oldu? Sence etkileri neler?

<b>Geçen hafta (3. Hafta):</b>
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**Bu hafta (4. hafta):**

6. (Önceki günlükte bahsettiklerinden **farklı olarak**) Geçen hafta ve bu hafta **yeni yöntemler ve/veya teknikler** kullandın mı? Hangi amaçlarla kullandın? Bunlar ne kadar faydalı oldu? Sence etkileri neler?

**Geçen hafta (3. Hafta):**

**Bu hafta (4. hafta):**

7. Geçen hafta ve bu hafta özellikle odaklandığın ve geliştirmeye çalıştığın dil becerileri var mı? (Okuma, yazma, dinleme, konuşma, kelime vb.). Bunları geliştirmek adına neler yaptın? Faydalı oldular mı?

**Geçen hafta (3. Hafta):**

**Bu hafta (4. hafta):**

8. Geçen hafta ve bu hafta dil öğrenme sürecinde yaşadığın **zorluklar veya sorunlar** oldu mu? Olduysa karşılaştığın zorluklar ya da sorunlar nelerdi? Bunların üstesinden gelebildin mi? Bu amaçla neler yaptın?

**Geçen hafta (3. Hafta):**

**Bu hafta (4. hafta):**

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9. Ekleme istediğin başka birşey var mı?

10. Lütfen aşağıdaki motivasyon grafiğinde 3. ve 4. haftalar için **İngilizce öğrenme motivasyonu yoğunluğunu, ne kadar çaba harcadığını, ve duygu durumunu** işaretleyebilir misin?

### MOTİVASYON GRAFİĞİ 2

Lütfen aşağıdaki tablolarda her bir hafta için size en uygun olan değeri işaretleyiniz. (5: çok yüksek/olumlu; -5: çok düşük/olumsuz).

Motivasyon yoğunluğu	Hafta 3	Hafta 4	Çaba durumu	Hafta 3	Hafta 4	Duygu durumu	Hafta 3	Hafta 4
5			5			5		
4			4			4		
3			3			3		
2			2			2		
1			1			1		
0			0			0		
-1			-1			-1		
-2			-2			-2		
-3			-3			-3		
-4			-4			-4		
-5			-5			-5		

### DİL ÖĞRENME GÜNLÜKLERİ 3

Lütfen aşağıdaki soruları geçen hafta ve bu haftaki **sınıf içi ve sınıf dışı** dil öğrenme aktivitelerini/çalışmalarını düşünerek cevaplayıp aşağıdaki mail adresine gönderebilir misin? Teşekkürler...

#### 5. & 6. HAFTALAR

1. Geçen hafta ve bu haftaki dil öğrenme sürecin ile ilgili **motivasyon yoğunluğunu** nasıl değerlendirirsin? Motivasyonunu **artıran** şeyler oldu mu? Ne ya da neler oldu, açıklayabilir misin?

<b>Geçen hafta (5. Hafta):</b>
<b>Bu hafta (6. hafta):</b>

2. Geçen hafta ve bu haftaki dil öğrenme sürecinde motivasyonunu **azaltan** şeyler oldu mu? Ne ya da neler oldu, açıklayabilir misin?

<b>Geçen hafta (5. Hafta):</b>
<b>Bu hafta (6. hafta):</b>



--

3. Geçen hafta ve bu haftaki dil öğrenme sürecin ile ilgili **duygu durumunu** açıklayabilir misin? Neler hissettin? Önceki haftalarla karşılaştığında hislerinde değişiklikler oldu mu? Ne gibi değişiklikler oldu?

<b>Geçen hafta (5. Hafta):</b>
<b>Bu hafta (6. hafta):</b>

4. Geçen hafta ve bu hafta dil öğrenme açısından ilerleme kaydettiğini düşünüyor musun? Bu süreçte sınıf içinde ve dışında ne gibi dil öğrenme çalışmaları veya aktiviteleri yaptın? Bunlar ne kadar faydalı oldu?

<b>Geçen hafta (5. Hafta):</b>
<b>Bu hafta (6. hafta):</b>

5. (Önceki günlüklerde bahsettiğin) İngilizce öğrenirken uyguladığın yöntemlerini ve/veya tekniklerini geçen hafta ve bu hafta da kullandın mı? Hangi amaçlarla kullandın? Bunlar ne kadar faydalı oldu? Sence etkileri neler?

<b>Geçen hafta (5. Hafta):</b>
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**Bu hafta (6. hafta):**

6. (Önceki günlüklerde bahsettiklerinden **farklı olarak**) Geçen hafta ve bu hafta **yeni yöntemler ve/veya teknikler** kullandın mı? Hangi amaçlarla kullandın? Bunlar ne kadar faydalı oldu? Sence etkileri neler?

**Geçen hafta (5. Hafta):**

**Bu hafta (6. hafta):**

7. Geçen hafta ve bu hafta özellikle odaklandığın ve geliştirmeye çalıştığın dil becerileri var mı? (Okuma, yazma, dinleme, konuşma, kelime vb.). Bunları geliştirmek adına neler yaptın? Faydalı oldular mı?

**Geçen hafta (5. Hafta):**

**Bu hafta (6. hafta):**

8. Geçen hafta ve bu hafta dil öğrenme sürecinde yaşadığın **zorluklar veya sorunlar** oldu mu? Olduysa karşılaştığın zorluklar ya da sorunlar nelerdi? Bunların üstesinden gelebildin mi? Bu amaçla neler yaptın?

**Geçen hafta (5. Hafta):**

**Bu hafta (6. hafta):**

9. Ekleme istediđin başka birşey var mı?

10.Lütfen aşağıdaki motivasyon grafiđinde 5. ve 6. haftalar için **İngilizce öğrenme motivasyonu yoğunluđunu, ne kadar çaba harcadıđını, ve duygu durumunu** işaretleyebilir misin?

### MOTİVASYON GRAFİĐİ 3

Lütfen aşağıdaki tablolarda her bir hafta için size en uygun olan deđeri işaretleyiniz. (5: çok yüksek/olumlu; -5: çok düşük/olumsuz).

Motivasyon yoğunluđu	Hafta 5	Hafta 6	Çaba durumu	Hafta 5	Hafta 6	Duygu durumu	Hafta 5	Hafta 6
5			5			5		
4			4			4		
3			3			3		
2			2			2		
1			1			1		
0			0			0		
-1			-1			-1		
-2			-2			-2		
-3			-3			-3		
-4			-4			-4		
-5			-5			-5		

## DİL ÖĞRENME GÜNLÜKLERİ 4

Lütfen aşağıdaki soruları geçen hafta ve bu haftaki **sınıf içi ve sınıf dışı** dil öğrenme aktivitelerini/çalışmalarını düşünerek cevaplayıp aşağıdaki mail adresine gönderebilir misin? Teşekkürler...

### 7. & 8. HAFTALAR

1. Geçen hafta ve bu haftaki dil öğrenme sürecin ile ilgili **motivasyon yoğunluğunu** nasıl değerlendirirsin? Motivasyonunu **artıran** şeyler oldu mu? Ne ya da neler oldu, açıklayabilir misin?

<b>Geçen hafta (7. Hafta):</b>
<b>Bu hafta (8. hafta):</b>

2. Geçen hafta ve bu haftaki dil öğrenme sürecinde motivasyonunu **azaltan** şeyler oldu mu? Ne ya da neler oldu, açıklayabilir misin?

<b>Geçen hafta (7. Hafta):</b>
<b>Bu hafta (8. hafta):</b>

3. Geçen hafta ve bu haftaki dil öğrenme sürecin ile ilgili **duygu durumunu** açıklayabilir misin? Neler hissettin? Önceki haftalarla karşılaştığında hislerinde değişiklikler oldu mu? Ne gibi değişiklikler oldu?

<b>Geçen hafta (7. Hafta):</b>
<b>Bu hafta (8. hafta):</b>

4. Geçen hafta ve bu hafta dil öğrenme açısından ilerleme kaydettiğini düşünüyor musun? Bu süreçte sınıf içinde ve dışında ne gibi dil öğrenme çalışmaları veya aktiviteleri yaptın? Bunlar ne kadar faydalı oldu?

<b>Geçen hafta (7. Hafta):</b>
<b>Bu hafta (8. hafta):</b>

5. (Önceki günlüklerde bahsettiğin) İngilizce öğrenirken uyguladığın yöntemlerini ve/veya tekniklerini geçen hafta ve bu hafta da kullandın mı? Hangi amaçlarla kullandın? Bunlar ne kadar faydalı oldu? Sence etkileri neler?

<b>Geçen hafta (7. Hafta):</b>
<b>Bu hafta (8. hafta):</b>

6. (Önceki günlüklerde bahsettiklerinden **farklı olarak**) Geçen hafta ve bu hafta **yeni yöntemler ve/veya teknikler** kullandın mı? Hangi amaçlarla kullandın? Bunlar ne kadar faydalı oldu? Sence etkileri neler?

<b>Geçen hafta (7. Hafta):</b>
<b>Bu hafta (8. hafta):</b>

7. Geçen hafta ve bu hafta özellikle odaklandığın ve geliştirmeye çalıştığın dil becerileri var mı? (Okuma, yazma, dinleme, konuşma, kelime vb.). Bunları geliştirmek adına neler yaptın? Faydalı oldular mı?

<b>Geçen hafta (7. Hafta):</b>
<b>Bu hafta (8. hafta):</b>

8. Geçen hafta ve bu hafta dil öğrenme sürecinde yaşadığın **zorluklar veya sorunlar** oldu mu? Olduysa karşılaştığın zorluklar ya da sorunlar nelerdi? Bunların üstesinden gelebildin mi? Bu amaçla neler yaptın?

<b>Geçen hafta (7. Hafta):</b>
<b>Bu hafta (8. hafta):</b>

9. Üniversitede İngilizce öğrenme sürecinin sonunda ulaşmak istediğin hedefe bu dönem boyunca ne kadar yaklaştığını düşünüyorsun? Nedenini açıklar mısın? Hedefine yaklaşmada yada yaklaşamAyşe neler etkili oldu?

10. Eklemek istediğin başka birşey var mı?

11. Lütfen aşağıdaki motivasyon grafiğinde 7. ve 8. haftalar için **İngilizce öğrenme motivasyonu yoğunluğunu, ne kadar çaba harcadığını, ve duygu durumunu** işaretleyebilir misin?

#### MOTİVASYON GRAFİĞİ 4

Lütfen aşağıdaki tablolarda her bir hafta için size en uygun olan değeri işaretleyiniz. (5: çok yüksek/olumlu; -5: çok düşük/olumsuz).

Motivasyon yoğunluğu	Hafta 7	Hafta 8	Çaba durumu	Hafta 7	Hafta 8	Duygu durumu	Hafta 7	Hafta 8
5			5			5		
4			4			4		
3			3			3		
2			2			2		
1			1			1		
0			0			0		
-1			-1			-1		
-2			-2			-2		
-3			-3			-3		
-4			-4			-4		
-5			-5			-5		

**APPENDIX-L: Consent Form for Student Participants****GÖNÜLLÜ KATILIM FORMU (ÖĞRENCİ)**

Merhaba,

Yapacak olduğum çalışmaya gösterdiğiniz ilgi ve bana ayırdığınız zaman için şimdiden çok teşekkür ederim. Bu formla, kısaca size ne yaptığımı ve bu araştırmaya katılmanız durumunda neler yapacağımızı anlatmayı amaçladım.

Bu araştırma için Hacettepe Üniversitesi Etik Komisyonundan izin alınmıştır. Araştırma, yabancı dil olarak İngilizce öğrenen Türk üniversite öğrencilerinin bireysel farklılıklarının hedefli motivasyon akımları üzerindeki olası rolünü incelemek için Prof. Dr. İsmail Hakkı ERTEN danışmanlığında hazırlanacak olan doktora tez çalışmamdır. Bu sebeple de, size vereceğim anketleri dikkatlice ve içtenlikle cevaplamanız, gerektiği takdirde sizden isteyeceğim birebir görüşmelerde ve dil öğrenme günlüğü tutma aşamalarında yer almanız oldukça önemlidir.

Araştırmaya gönüllü olarak katılım esastır. İhtiyaç duyduğum takdirde sizinle yapacağımız görüşme sırasında ses kaydı yapmak istiyorum. Ancak bu ses kayıtları sadece bilimsel bir amaç için kullanılacak ve bunun dışında hiçbir amaçla kullanılmayacaktır. Sizin isteğiniz doğrultusunda kayıtlar silinebilecek ya da size teslim edilebilecektir. Adınızın araştırmada kullanılması gerekecekse, bunun yerine takma bir ad kullanılacaktır. İsteddiğiniz zaman çalışmadan ayrılabilirsiniz. Bu durumda yapılan kayıtlar, anket, görüşme ve günlük verileri kullanılmayacaktır. Çalışmadan ayrılmanız size hiçbir sorumluluk veya yükümlülük getirmeyecektir.

Bu bilgileri okuyup bu araştırmaya gönüllü olarak katılmanızı ve size verdiğim güvenceye dayanarak bu formu imzalamanızı rica ediyorum. Sormak istediğiniz herhangi bir durumla ilgili benimle her zaman iletişime geçebilirsiniz. Araştırma sonucu hakkında bilgi almak için iletişim bilgilerimden bana ulaşabilirsiniz. Formu okuyarak imzaladığınız için çok teşekkür ederim.

Katılımcı Öğrenci

Adı, soyadı:

İmza:

Sorumlu araştırmacı:

Prof. Dr. İsmail Hakkı Erten

HÜ Eğitim Bilimleri Enstitüsü

Araştırmacı:

Aycan DEMİR AYAZ

Adres:Orta Doğu Teknik

Üniversitesi Yabancı Diller

Eğitimi Bölümü Üniversiteler

Mahallesi Dumlupınar Bulvarı

No:1 06800 Çankaya/Ankara



**APPENDIX-M: Consent Form for Instructor Participants****GÖNÜLLÜ KATILIM FORMU (ÖĞRETMEN)**

Sevgili Meslektaşım,

Çalışmama gösterdiğiniz ilgi ve ayırdığınız zaman için çok teşekkür ederim. Yabancı dil olarak İngilizce öğrenen Türk üniversite öğrencilerinin bireysel farklılıklarının hedefli motivasyon akımları üzerindeki olası rolünü incelemek adına Prof. Dr. İsmail Hakkı ERTEN danışmanlığında hazırlanacak olan doktora tez çalışmamda, öğrencileriniz arasından hedefli motivasyon akımlarını yaşayan, yaşamayan, ve kısmen yaşayan öğrencileri belirleyebilmem adına sizin fikirlerinize ihtiyaç duymaktayım. Bu nedenle sizinle görüşme yapmak istiyorum. Sağık bir şekilde veri toplayabilmek için de, bu görüşmeleri ses kaydına almak istiyorum. Öğrencilerinizin hedefli motivasyon akımları durumları ile ilgili vereceğiniz bilgiler benim bu akımları yaşayan, yaşamayan ve kısmen yaşayan öğrenci grupları oluşturmamda ve araştırmanın gelecek aşamalarında bu öğrencilerden veriler toplayabilmemde oldukça faydalı olacaktır. Amacı yukarıda açıklanmış olan bu araştırma için Hacettepe Üniversitesi Etik Komisyonundan izin alınmıştır.

Bölümdeki diğer meslektaşlarınızla birlikte beyin fırtınası yoluyla öğrenci adayları belirleyeceğimiz görüşmemiz sırasında, verilerin kayba uğramaması amacıyla ses kaydı yapmak istiyorum. Kayda alınan tüm veriler sadece bilimsel bir amaçla kullanılacak ve kimse ile paylaşılmayacaktır. Araştırmada isminizin kullanılması gerekecekse, takma bir isim kullanılacaktır. Verecek olduğunuz bilgilerden dolayı kendinizi rahatsız hissedeceğiniz bir durumla karşı karşıya bırakılmayacağınızı, rahatsız hissettiğiniz takdirde çalışmadan ayrılabileceğinizi taahhüt ediyorum. Uygulama sırasında merak ettiğiniz konular ve uygulama sonrasında sonuçlar ile ilgili tarafımdan her zaman bilgi alabilirsiniz. Dilediğiniz takdirde kayda alınan veriler sizinle paylaşılacaktır.

Yukarıdaki tüm açıklamaları okuyarak sizin bu çalışmaya gönüllü olarak katıldığınızı ve sahip olduğunuz hakları araştırmacı olarak koruyacağıma dair bir belge olarak bu formu imzalamanızı rica ediyorum.

Katılımcı Öğretmen

Adı, soyadı:

İmza:

Sorumlu araştırmacı:

Prof. Dr. İsmail Hakkı Erten

HÜ Eğitim Bilimleri Enstitüsü

Araştırmacı:

Aycan DEMİR AYAZ

Adres:ODTÜ Yabancı Diller

Eğitimi Bölümü Üniversiteler

Mahallesi Dumlupınar Bulvarı

No:1 06800 Çankaya/Ankara

## APPENDIX-N: Ethics Committee Approval



T.C.  
HACETTEPE ÜNİVERSİTESİ  
Rektörlük

Tarih: 25.04/2019  
Sayı: 35853172-101.02.02.  
E.00000562888



Sayı : 35853172-101.02.02  
Konu : Aycan DEMİR AYAZ Hk.

## EĞİTİM BİLİMLERİ ENSTİTÜSÜ MÜDÜRLÜĞÜNE

İlgi : 02.04.2019 tarihli ve 51944218-101.02.02/00000536001 sayılı yazı.

Enstitümüz Yabancı Diller Eğitimi Anabilim Dalı İngiliz Dili Eğitimi Bilim Dalı Doktora programı öğrencilerinden Aycan DEMİR AYAZ'ın Prof. Dr. İsmail Hakkı ERTEN danışmanlığında yürüttüğü "Türkiye'de Yabancı Dil Olarak İngilizce Öğrenenlerin Hedefli Motivasyon Akımlarında Öz Düzenlemenin Yeri" başlıklı tez çalışması Üniversitemiz Senatosu Etik Komisyonunun 16 Nisan 2019 tarihinde yapmış olduğu toplantıda incelenmiş olup, etik açıdan uygun bulunmuştur.

Bilgilerinizi ve gereğini saygılarımla rica ederim.

e-İmzalıdır  
Prof. Dr. Rahime Meral NOHUTCU  
Rektör Yardımcısı

Evrakın elektronik imzalı suretine <https://belgedogrulama.hacettepe.edu.tr> adresinden (5de4a95-1cb7-42a0-b7cf-e27ed5305ec8) kodu ile erişebilirsiniz. Bu belge 5070 sayılı Elektronik İmza Kanunu'na uygun olarak Ötümeli Elektronik İmza ile imzalanmıştır.

Hacettepe Üniversitesi Rektörlük 06100 Sıhhiye-Ankara  
Telefon:0 (312) 305 3001-3002 Faks:0 (312) 311 9992 E-posta: yscimrd@hacettepe.edu.tr İnternet  
Adresi: www.hacettepe.edu.tr

Doç. Dr. Dilek İLİÇ



### APPENDIX-O: Declaration of Ethical Conduct

I hereby declare that...

- I have prepared this thesis in accordance with the thesis writing guidelines of the Graduate School of Educational Sciences of Hacettepe University;
- all information and documents in the thesis/dissertation have been obtained in accordance with academic regulations;
- all audio visual and written information and results have been presented in compliance with scientific and ethical standards;
- in case of using other people's work, related studies have been cited in accordance with scientific and ethical standards;
- all cited studies have been fully and decently referenced and included in the list of References;
- I did not do any distortion and/or manipulation on the data set,
- and **NO** part of this work was presented as a part of any other thesis study at this or any other university.

14.06.2023

Aycan DEMİR AYAZ

## APPENDIX-P: Thesis/Dissertation Originality Report

18/06/2023

HACETTEPE UNIVERSITY

Graduate School of Educational Sciences

To The Department of Foreign Language Education

Thesis Title: DIRECTED MOTIVATIONAL CURRENTS AND INDIVIDUAL DIFFERENCES:  
A MIXED-METHOD INVESTIGATION IN THE TURKISH EFL CONTEXT

The whole thesis that includes the *title page, introduction, main chapters, conclusions and bibliography section* is checked by using **Turnitin** plagiarism detection software take into the consideration requested filtering options. According to the originality report obtained data are as below.

Time Submitted	Page Count	Character Count	Date of Thesis Defense	Similarity Index	Submission ID
17/06/2023	365	502225	26/05 /2023	%15	2117837986

Filtering options applied:

1. Bibliography excluded
2. Quotes included
3. Match size up to 5 words excluded

I declare that I have carefully read Hacettepe University Graduate School of Educational Sciences Guidelines for Obtaining and Using Thesis Originality Reports; that according to the maximum similarity index values specified in the Guidelines, my thesis does not include any form of plagiarism; that in any future detection of possible infringement of the regulations I accept all legal responsibility; and that all the information I have provided is correct to the best of my knowledge.

I respectfully submit this for approval.

**Name Lastname:** Aycan DEMİR AYAZ  
**Student No.:** N16140965  
**Department:** Foreign Language Education  
**Program:** English Language Teaching  
**Status:**  Masters  Ph.D.  Integrated Ph.D.

Signature

**ADVISOR APPROVAL**

APPROVED

Assist. Prof. Dr. Nilüfer CAN DAŞKIN

## APPENDIX-Q: Yayınlanma ve Fikrî Mülkiyet Hakları Beyanı

Enstitü tarafından onaylanan lisansüstü tezimin/raporumun tamamını veya herhangi bir kısmını, basılı (kâğıt) ve elektronik formatta arşivleme ve aşağıda verilen koşullarla kullanıma açma iznini Hacettepe Üniversitesine verdiğimi bildiririm. Bu izinle Üniversiteye verilen kullanım hakları dışındaki tüm fikri mülkiyet haklarım bende kalacak, tezimin tamamının ya da bir bölümünün gelecekteki çalışmalarda (makale, kitap, lisans ve patent vb.) kullanım hakları bana ait olacaktır.

Tezin kendi orijinal çalışmam olduğunu, başkalarının haklarını ihlal etmediğimi ve tezimin tek yetkili sahibi olduğumu beyan ve taahhüt ederim. Tezimde yer alan telif hakkı bulunan ve sahiplerinden yazılı izin alınarak kullanılması zorunlu metinlerin yazılı izin alınarak kullandığımı ve istenildiğinde suretlerini Üniversiteye teslim etmeyi taahhüt ederim.

Yükseköğretim Kurulu tarafından yayınlanan "**Lisansüstü Tezlerin Elektronik Ortamda Toplanması, Düzenlenmesi ve Erişime Açılmasına İlişkin Yönerge**" kapsamında tezim aşağıda belirtilen koşullar haricince YÖK Ulusal Tez Merkezi / H.Ü. Kütüphaneleri Açık Erişim Sisteminde erişime açılır.

- Enstitü/Fakülte yönetim kurulu kararı ile tezimin erişime açılması mezuniyet tarihinden itibaren 2 yıl ertelenmiştir.<sup>(1)</sup>
- Enstitü/Fakülte yönetim kurulunun gerekçeli kararı ile tezimin erişime açılması mezuniyet tarihinden itibaren ... ay ertelenmiştir.<sup>(2)</sup>
- Tezimle ilgili gizlilik kararı verilmiştir.<sup>(3)</sup>

14/06/2023

Aycan DEMİR AYAZ

*"Lisansüstü Tezlerin Elektronik Ortamda Toplanması, Düzenlenmesi ve Erişime Açılmasına İlişkin Yönerge"*

- (1) Madde 6. 1. Lisansüstü teze ilgili patent başvurusu yapılması veya patent alma sürecinin devam etmesi durumunda, tez danışmanının önerisi ve enstitü anabilim dalının uygun görüşü üzerine enstitü veya fakülte yönetim kurulu iki yıl süre ile tezin erişime açılmasının ertelenmesine karar verebilir.
- (2) Madde 6.2. Yeni teknik, materyal ve metotların kullanıldığı, henüz makaleye dönüşmemiş veya patent gibi yöntemlerle korunmamış ve internetten paylaşılması durumunda 3. şahıslara veya kurumlara haksız kazanç; imkânı oluşturabilecek bilgi ve bulguları içeren tezler hakkında tez danışmanının önerisi ve enstitü anabilim dalının uygun görüşü üzerine enstitü veya fakülte yönetim kurulunun gerekçeli kararı ile altı ayı aşmamak üzere tezin erişime açılması engellenebilir.
- (3) Madde 7. 1. Ulusal çıkarları veya güvenliği ilgilendiren, emniyet, istihbarat, savunma ve güvenlik vb. konulara ilişkin lisansüstü tezlerle ilgili gizlilik kararı, tezin yapıldığı kurum tarafından verilir\*. Kurum ve kuruluşlarla yapılan işbirliği protokolü çerçevesinde hazırlanan lisansüstü tezlere ilişkin gizlilik kararı ise, ilgili kurum ve kuruluşun önerisi ile enstitü veya fakültenin uygun görüşü üzerine üniversite yönetim kurulu tarafından verilir. Gizlilik kararı verilen tezler Yükseköğretim Kuruluna bildirilir.

Madde 7.2. Gizlilik kararı verilen tezler gizlilik süresince enstitü veya fakülte tarafından gizlilik kuralları çerçevesinde muhafaza edilir, gizlilik kararının kaldırılması halinde Tez Otomasyon Sistemine yüklenir

\*Tez danışmanının önerisi ve enstitü anabilim dalının uygun görüşü üzerine enstitü veya fakülte yönetim kurulu tarafından karar verilir

