

## A Display of Patterns of Change in Learners' Motivation: Dynamics Perspective

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**Abstract:** Getting to understand patterns and causes of motivational changes experienced by language learners while studying a foreign language can be of significant value. This paper aims to explore patterns of such fluctuations at the tertiary level. Through a dynamic systems perspective, this study employed Retrodictive Qualitative Modelling to generate the learner prototypes. The data were then collected from two distinct cases that represent different motivational prototypes. While the first one manages to have a highly intense goal-directed motivation (Directed Motivational Currents- DMC), the second one does not seem to have DMC. Data concerning ebbs and flows of learners' motivation and affective states in the classes were collected through self-plotted motigraphs over six weeks. The results showed a significant difference between the motivational patterns in the two learners. The first one with an identifiable DMC displayed a more stable pattern on the motigraph and the other one drifted aimlessly without a clear focus. The findings of this preliminary study will be discussed in relation to dynamic theories of motivation. Suggestions for further research will be offered.

### Anahtar

sözcükler Hedefli motivasyon akımları, motivasyon grafiği, motivasyon dinamikleri.

### Genç Öğrenenlerin İngilizce Öğrenmeye Olan Tutum ve Motivasyonu

**Öz:** Yabancı dil öğrenirken dil öğrenenlerinin yaşadığı motivasyon değişikliklerinin desenlerini ve nedenlerini anlamaya çalışmak alanda önemli bir değer olabilir. Bu makale, üniversite düzeyindeki bu dalgalanmaların desenlerini araştırmayı amaçlamaktadır. Dinamik sistemler kuramı ile, bu çalışmada, öğrenci prototipleri oluşturmak için geçmişe dayalı nitel modelleme yöntemi kullanıldı. Sonrasında, veriler farklı motivasyonel prototipleri temsil eden iki farklı vaka üzerinden toplanmıştır. Bu vakalardan ilki, hedefe yönelik çok yoğun bir motivasyona (hedefli motivasyon akımlarına) sahipken, ikincisinin hedefli motivasyon akımlarını deneyimlemediği görülmektedir. Öğrencilerin İngilizce dersindeki motivasyonları ve duygularındaki azalma ve artışlara ilişkin veriler altı hafta boyunca kendi çizdikleri motivasyon grafikleriyle toplandı. Sonuçlar, iki öğrencinin motivasyon desenleri arasında anlamlı bir fark olduğunu gösterdi. Tanımlanabilir bir hedefli motivasyon akımları deneyimleyen ilk öğrenci motivasyon grafiğinde daha istikrarlı bir desen sergilerken, diğeri motivasyon grafiğinde açık bir hedefi olmadığından amaçsızca sürüklenen bir desen ortaya koymaktadır. Bu ön çalışmanın bulguları dinamik motivasyon teorileri ile bağlantılı olarak tartışılacaktır. Sonraki çalışmalar için öneriler de sunulacaktır.

## 1. Introduction

Motivation is one of the most crucial predictive factors of foreign/second (L2) language learning achievement; therefore, there has been a good number of research studies and publications on the nature and role of motivation in the process of L2 over the last three decades. Since the publication of their pioneering research (e.g. Gardner and Lambert, 1959) in the mainstream L2 motivation research, motivation has been taken as a stable individual difference factor as a variable. However, lately, our understanding of what constitutes one's motivation has started changing via process-oriented models and principles of motivation, the changing methodological concerns in social sciences and especially the developing realization of the process of complex dynamic systems working (Ellis, 2007; Larsen-Freeman and Cameron, 2008). Within such issues taken forefront, researchers have shifted their attention to the dynamic and fluctuant nature of the motivation process while attempting to examine L2 motivation. According to Dörnyei (2001, 2003), this dynamic aspect is of particular importance because learners are liable to demonstrate fluctuations in their motivation in the process of learning the target language both in a shorter as well as over a longer period of time. Ellis (2007), in agreement with Dörnyei (2001, 2003), also points to the significance of the identification of the dynamic aspect as one of the key improvements in the mainstream L2 motivation research.

Drawing on both current strands of the mainstream motivation theories of psychology and various aspects in motivational study in applied linguistics, such as the L2 motivational self system and complex dynamic systems theory (Dörnyei, Henry & Muir, 2016; Dörnyei, Ibrahim & Muir, 2015; Dörnyei, Muir & Ibrahim, 2014; Henry, Davydenko & Dörnyei, 2015; Ibrahim, 2016; Muir & Dörnyei, 2013), a recent development in L2 motivation, Directed Motivational Currents (DMCs), has been introduced.

DMC is described as a motivational phenomenon in which an individual, while being involved in intense activities stimulated by and in a quest of an individually significant, expressively rewarding, and vital end, has been caught up in a salient and facilitative pathway. A DMC is also defined as “an intense motivational drive that is capable of stimulating and supporting long term behaviors such as learning a foreign/second language” (Dörnyei et al., 2014, p. 9). The uniqueness of the DMC phenomenon comes from its enabling individuals who have been caught up in a DMC to perform at an exceptionally high level of productivity, in other words over and above what is expected of them (Muir & Dörnyei, 2013). Once an individual starts to experience a DMC, the DMC disregards all other inclinations and temptations and thus directs the individual towards the goal/vision at an astounding speed and with stunning energy. It is so powerful that even the people around the individual are easily able to recognize something unfamiliar because of its influence in the person who has been caught up in a DMC. As soon as the individual attains the goal, the current will go down, sometimes with a decreasing energy towards achieving the goal due to the realization that the highly desired end state is within the individual's reach, upon the attainment of the goal (Dörnyei et al., 2015). Each DMC is unique as DMCs are directed by personal vision and influenced by contextual factors, so the form, duration and even the intensity of the drive of each DMC shows a change. Because of the variations stated above, it is hard to describe the phenomenon precisely. However, there are three essential components of the process, which are identified in all DMCs: goal-orientedness, salient facilitative pathway, and positive emotionality. The significance of these components has been emphasized by Muir (2016) who states that “...without which it may not be dubbed a DMC” (p. 35).

The first component, goal-orientedness, is essentially one of the most important

distinguishing criteria of all DMC cases. This is because a consistent clearly defined superordinate goal helps the individual adjust power to “provide cohesion for one’s efforts and help focus energy on final goal achievement” (Dörnyei et al., 2015, p. 99); in other words, its presence constructs and sustains DMCs. A DMC always needs to be “directional”, enabling the individual to experience it when struggling towards a “specific” and “clearly defined” end state (Dörnyei et al., 2014, p. 13; Muir, 2016). For a goal to be motivating and to give rise to the highest level of engagement and productivity, it must be both specific and difficult, and so the goal can be perceived as crucial and obtainable, and therefore it draws on the findings of the goal-setting theory (Locke, 1996). To make happen such a strong motivational drive in which a DMC can occur, Dörnyei et al. (2016) recommends three additional aspects which DMC goals have to contain: 1) vision, without which “the peculiar intensity of a DMC cannot be achieved”, 2) self-concordant functioning for an integral part of an individual’s core identity which becomes “chronologically accessible in working cognition” to strengthen the primary and continued motivation, 3) and smaller, proximal parts, which helps to advance and reinforce the general vision/goal (Henry et al., 2015, p. 331).

Secondly, a DMC is also recognized by a salient facilitative structure, in that there is a clearly produced pathway from its appearance to its final condition that affects in sequence both the strength of the DMC structure and the further pathway for the whole DMC behavior. As soon as it starts, a “distinctive structure” is required, or in other terms, “an adequately tailored pathway, allowing the individual to envisage a clear route to success” so as to sustain the development of motivated action is required (Dörnyei et al., 2015, p. 100). In order to have such a pathway, a DMC needs several other elements (Dörnyei et al., 2015, p. 100). The first one is “behavioral routines.” This suggests that the individual challenges involved in doing some a new rigid set of routines without any special volitional control that raises a “motivational autopilot” within which “the initial momentum rules out the necessity for a motivational intervention each and every time a new step within the sequence is to be carried out” (Dörnyei et al., 2014; p. 14). The second component is about ‘sub-goals’ which an effective DMC employs so as to lead to a desired behavior while channeling motivational energy, which increases with the recognition of one’s development resulting in an unceasing engagement until each and every sub-goal is acquired; therefore, the development serves not only to break down the DMC pathway into smaller reachable steps but also to add structure which enables one to observe one’s achievement, in other words, “progress checks.” Finally, “affirmative feedback” is also believed to influence one’s DMC. According to Dörnyei et al. (2014), individuals “may only continue in a DMC if they have a clear and on-going perception that they are on track towards achieving their vision” (p. 15).

The third component of the DMC construct is positive emotionality, or the unique feelings linked with being highly positive and supportive, which are hence motivational and productive during the process. Dörnyei et al. (2015) explain this highly positive emotionality as significant because “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). In other words, any step taken to move toward the goal allows one to feel pleasure, reveals some positive affect and brings about further energy corresponding to the goal.

As summarized above, the DMC concept is featured by three core components, goal/vision-orientedness, salient facilitative structure, and positive emotionality, each of which play a crucial role in generating individuals’ motivational currents for engaging with some intense activities in pursuit of a personal crucial goal. The DMC construct began recently in 2013 and

therefore, this construct sheds new light on the research in L2 motivation and opens up ample potential for future research because the amount of research on DMCs is still very limited. Thus, more empirical studies and investigations are needed to determine the features of DMCs and validate its theoretical tenets. The purpose of the current study is to contribute to filling the gap by analyzing a specific case of DMC using the dynamic systems theory with first year university students learning English as a foreign language at the Adiyaman University of Turkey. The dynamic aspect of the recent concept has not been reflected in any research conducted on it so far. In this respect, the purpose of the study is also to reveal whether there are any fluctuations in the levels of motivation and affective states and the factors behind said fluctuations in two cases: the first case engaged in a DMC and the second case not engaged in a DMC.

## **2. Method**

### **2.1. Research Questions**

In the present study, a qualitative case study design was employed as a method of enquiry in order to answer the following research questions:

1. What are the major features of a DMC identified in the behavior of an individual caught up in it?
2. To what extent do the core features of a DMC identified in the behavior of an individual caught up in it account for the language learner studying at the tertiary level?
3. What are the patterns of motivational and affective states fluctuations of the learner who experiences a DMC and highly motivated language learner who hasn't been caught up in a DMC?

### **2.2. Participants and Setting**

The present study was conducted as a qualitative case study. The study was conducted at Adiyaman University in Turkey. Participants in their first year of tertiary level education in Adiyaman were selected by the use of retrodictive qualitative modelling after six weeks of classroom observation at the beginning of the autumn term of the 2016-2017 academic year. After obtaining the necessary consent to carry out the research, instructors of English employed at the university were invited to take part in the first phase of the study, for the identification of learner archetypes of the first year university students, as a part of the retrodictive qualitative modelling (Dörnyei, 2014).

The findings of the first step of the retrodictive qualitative modelling, namely the identification of the learner archetypes, proposed by Dörnyei (2014), reveals eight emerging archetypes: 1) a highly competitive and motivated student with some positive attitudes and emotions; 2) a highly motivated student with some negative attitudes and emotions; 3) a low motivated student with high English proficiency; 4) a low motivated student with moderate English proficiency; 5) a mediocre student in terms of motivation and English proficiency; 6) an unmotivated student with higher than average language proficiency; 7) an unmotivated student with poor English proficiency and poor general ability, and 8) an unmotivated student with low English proficiency with some positive emotions.

In order to allow for intensive, individual-level microanalysis, two participants were selected through purposive sampling in line with the aims of the study: one whose motivational experience had all the key elements of DMCs (a highly competitive and motivated student with some positive attitudes and emotions) and another whose motivational experience did

not have the key elements of DMCs (a highly motivated student with some negative attitudes and emotions). The other six students were excluded from the study.

The highly motivated student who was caught up in a DMC was Mira (female, 18 years old, BA in Primary School Teaching), and the other highly motivated student whose motivational experience did not have the core elements of DMC was Betül (female, 19 years old, BA in Social Sciences Teaching). The learners were assigned pseudonyms for the confidentiality. Both were born and brought up in Turkey and were native speakers of Turkish.

### **2.3. Data Collection Procedure and Analysis**

This study employed three data collection instruments: a teacher focus group interview, semi-structured interviews, and a motigraph (Chan, Dörnyei, & Henry, 2015) with the participating learners. The teacher focus group discussion and semi-structured interview were conducted as a part of retrodictive qualitative modelling (Dörnyei, 2014) for the selection of the participants. Ethical considerations were attended to. After obtaining the necessary consent to conduct the research, a number of EFL instructors working at the university were asked to participate in a focus group interview for the first stage of the study –to identify learner archetypes in the first year university students who take English as a compulsory Foreign Language course. The EFL instructors were provided information about the procedures. Ten instructors agreed to take part in the focus group interview carried out in October, 2016. Here, they agreed on eight salient learner archetypes among the first year university students who took English as a Foreign Language. Having identified the learner archetypes, they were asked to nominate prototypical learners for each occurring archetype.

Drawing on this list of names, eight learners were asked to participate in semi-structured interviews in order to gain a rich understanding of the core components and signature dynamics of their motivational systems for individual students fitting these archetypes. The purpose of this semi-structured interview was to identify the vital actions and improvements within the system that generate each distinctive learner type, and to “understand why a particular student ended up in one attractor state (learner type) and not another” (Dörnyei, 2014, p. 85). After conducting interviews, eight learner archetypes were identified in the teacher-focus group discussion in the first phase of retrodictive qualitative modelling (Dörnyei, 2014), and two highly motivated students with different profiles in terms of experiencing a DMC were selected in line with the aims of the study. Both students were interviewed on one occasion in the final phase of the RQM. Using an interview guide, the students were asked questions concerning their English language learning experiences in school; their changing attitudes towards learning English, motivations, and affective states; their English learning habits; their family influences; their imaginary view of the English speaker/user they would like to become, and the main dimensions of DMCs in their motivational experiences. During the interviews, the participants were mainly questioned about their motivational behavior. Information pertaining to the core features of DMCs (goal-orientedness, salient facilitative structure, positive emotionality and motivational intensity) was also sought during the interview. The interviews, which were conducted in Turkish and took place in a quiet meeting room, lasted for about 30 minutes. The audio-recordings of the interviews were transcribed and afterwards translated into English.

Self-plotted motigraphs on which participants indicated their levels of motivation and affective states over a six weeks period were completed by the selected participants as an elicitation device after the semi-structured interview. The instrument was adapted and revised by taking the aims and the research questions into consideration (Chan et al., 2015). It was

arranged to enable them to map their levels of motivation and affective states, thus enabling us to focus on their fluctuations in motivational intensity and affective states in each week's lesson and their reflections on these fluctuations.

The data analysis was performed through both a thematic coding analysis method and general content analysis principles, which is utilized in qualitative research. In other words, the data analysis part of the study involved first identifying the recurring items or themes in the data obtained from the individual semi-structured interviews and motigraphs with special emphasis being put on the core components of DMCs, changes in motivational intensity and affective states of the students in the lessons plus the factors, such variations could be attributed to. Relevant parts were emphasized and put into codes with varying categories, and lastly the relation of the categories and interaction between them was subsequently analyzed. Similarities and dissimilarities were also explored to clarify all-encompassing patterns and possible links between the learners (Gibson & Brown, 2009). The triangulation of different forms of data gathering techniques was ensured to strengthen the structure of the study and to increase reliability and validity of the results. In this study, in order to provide a comprehensive analysis of the research questions, a qualitative case study as a strategy of enquiry is employed by collecting data through motigraphs, personal semi-structured interviews, and a teacher focus-group interview.

### **3. Results**

This section presents the two participants' patterns of L2 motivational fluctuations, changes in affective states and perceptions of these changes. Despite the similarities in previous language learning experience, the results show Mira and Betül differ considerably in their fluctuations of L2 motivation and affective states over a six-week period, and the changing pattern of their L2 motivation is due to their personal learning and living experiences in language learning. In order to focus on the individual case, the following subsections report the changing patterns of the two participants' motivations and affective states and their language learning experiences separately.

#### **3.1. Mira's Case**

Mira was described as what most instructors would describe as a good pupil: she pays attention, is an active-participant and knows the answers to teachers' questions. She is not easily distracted, but sometimes needs clarification when something is not understood.

According to her own retrospective account in the third phase of the retrodictive qualitative modelling, Mira's previous language learning experiences implied that she looked possibly and potentially prepared for a DMC experience. She stated that she was deeply excited and thrilled to learn English and decided to make herself prepare for her further life by learning English as a priority. She also said that she had a strong desire to learn English during the high school years, but her priority was to pass the university entrance examination to study at a university. Her previous language learning experiences did not trigger a DMC to emerge; however, they paved the way to experience a DMC. When she started to study at a university, she was determined to learn English. So, she started to learn the language vigorously and with full commitment as soon as her tertiary level education began, as is the case with learners experiencing DMCs. In the interview session, she demonstrated all three-core characteristics of DMC. The systematic investigation identified Mira who had goal/vision-orientedness, salient and facilitative structure, and positive emotional loading, namely the three core components of DMC. The present study discovered that the DMC concept explained Mira's experience of English learning motivation well.

### **3.1.1. Features of the DMC**

#### **3.1.1.1. Goal/vision-orientedness**

A DMC has to be stimulated by and in quest of a clear well-defined personally significant goal or vision (Dörnyei et al., 2015). In her experience, Mira succeeded in developing a strong vision of the future which consecutively led and shepherded all her attempts towards the superordinate goal of learning English. Her vision did not blur or decline; on the contrary, it was always vividly present throughout the period of data collection of motigraph data. She said that her vision began to develop only after she started to study at the university:

Previously I knew that I needed to learn English to further my career after BA. Day after day, becoming a competent user in English was my only thought. I felt that it would give me something more than learning an only language; it would enable me to be a successful and active person in my future life.

#### **3.1.1.2. A salient facilitative structure**

A strong vision needs a deep-rooted well-defined track, a pathway which guides the learner towards the superordinate goal and does not let the motivational surge get wasted (Dörnyei et al., 2015). As stated previously, a salient facilitative structure consists of three elements: a clear start/end point, sets of behavioral routines, and regular proximal sub-goal. Each one of these elements is distinctly found in Mira's case as discussed below.

During the semi-structured interview session, Mira could easily remember the details on the starting point of her DMC. She was intensely exhilarated by the new learning environment at the university and showed the early burst of emotions. Her mood altered instantly in order to be ready to experience a DMC, and she essentially developed a novel vision for her own future. The shift in her attention and interest took place instantly when she started the university education:

I was decisive in learning English when I was at high school and was positive about my wish of learning it. Then, I searched on the Internet and downloaded some free authentic materials and found free online lessons even after our first English lesson at the university. I was solely determined and driven to make it happen.

Behavioral routines are regularly repeated and create an established pattern, so they bring consistency. The individual learner and the people around him/her can easily notice such routines. They are not executed involuntarily but are performed willingly and normally as part of the learner's daily life (Dörnyei et al., 2014).

A few such regular behaviors were witnessed in Mira's daily life based on her retrospective account during the semi-structured interview. Following a foreign TV series in English twice a week was one of them. She also watches videos to improve her vocabulary and to evaluate herself regularly on a mobile application everyday:

I watched a TV series in English. I enjoyed very much while watching it. I sometimes couldn't understand a word of it, but I liked to do it. When I started to perceive some words and phrases, I got more motivated to watch them. To understand more words, phrases, and even sentences, I also used the mobile application called "English Central". Every night, I watched short videos on varying subjects. Sometimes, I got caught up in it so that I watched twenty

videos a night. I could also improve my pronunciation via this application.

The last component of a facilitative structure is the proximal sub-goals. Henry et al. (2015) believed that proximal sub-goals act as checkpoints while moving towards the ultimate target. Sub-goals provide an opportunity for the individual to self-check, receive feedback, and keep on track. Then, the individual is able to evaluate his/her progress and estimate the remaining distance. Mira presented some of her proximal sub-goals, which designate a sort of gradual progress, aligned with her improving competency:

I used the app on my smart phone to see the progress in my basic competence.  
I wanted to watch all of the videos on A1 level in this term. I felt improving.

### 3.1.1.3. Positive emotionality

The other major element of DMCs is a positive emotional loading. Learners caught up in a DMC are expected to feel positive emotion while following a highly personalized intrinsic goal (Dörnyei, et al. 2015). Henry et al. (2015) refer to eudaimonic pleasure as the result of actualizing an individual's potentials in pursuit of their highly valued goal/vision. Mira's emotion was positive towards what she was involved in. She experienced pleasing feelings throughout her permanent dedication to learn it:

It seemed to me that everything I did was fantastic. As I walk down the road, I try to understand the English texts on the signs. If there are some vocabulary items that I do not know, I immediately open the dictionary app on my smart phone. Then, I feel relaxed and my enthusiasm to learn it gets so high that I am eager to study even harder. I never feel exhausted.

### 3.1.2. Mira's patterns of motivational and affective states changes

In order to understand her fluctuations in motivation and affective states, a self-plotted motigraph was used. The findings of the motigraph indicated that her short-term motivation during the lessons was not susceptible to considerable change because of the strong vision of her future goal. Figure 1 below shows her patterns of fluctuations in motivation and affective states.

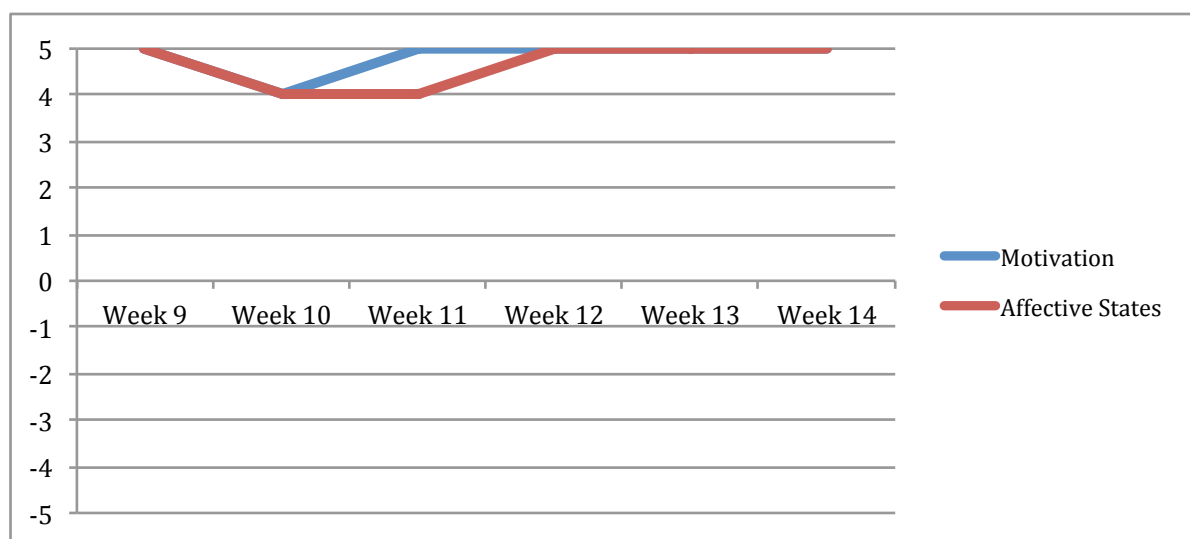


Figure 1. Mira's patterns of fluctuations in motivation and affective states.



The results of the self-plotted motigraph data indicate that Mira's motivation started quite high, went on quite high until week ten, tapered slightly in week ten, and then went on quite high until the end of the term. Weeks ten and eleven were the times in which Mira got her comprehensive marks of her first and second midterm exams in the class up to those points. The ebb in her motivation in week ten is due to that reason. Having looked at her affective states on the motigraph data, it is realized that her affective states are closely in line with her motivation. The excerpt below indicates that she considers her ebb in motivation and affective states in week ten and eleven as:

My motivation to learn English is always high because I have the goal I want to achieve. In week ten, my motivation decreased because I thought I was not rewarded for my efforts. However, then I thought it was not abnormal to have some inadequacies so I realized I had to make more effort for my goals in the long run. After that, I have tried to study more and make up for it. In line with my thoughts, I feel relaxed and I believe I succeeded it.

What is clear is that the relatively high motivation and affective levels of Mira throughout the semester show student motivational drive in a DMC state. Though there is a subtle decrease in her short-term motivation, her long-term goals seem to have a larger impact on her long-term motivation. More stable patterns of fluctuation in her motivation and affective states seem to be affected by her being in a DMC state. However, to what extent the core features of her DMC state affect the patterns of her motivational and affective states fluctuations is unclear.

### **3.2. Betül's Case**

Betül, described as enthusiastic but easily distracted, is serious about her learning in general. Despite being uncertain about learning English for her future life, she learns easily and generally has very high grades. She puts much effort into classroom tasks.

According to her own retrospective account in the third phase of the retrodictive qualitative modelling, Betül seemed to have a goal to learn English as the first step towards another goal. However, she was not ready to take that first step for a DMC experience for her English learning goal because her drive to pursue her English learning goal was not activated the importance of the other lessons that she took this term. She did not have a clear vision regarding her goal. She has not started to see learning English as a priority in her life yet. Thus, her short-term motivation and affective states were susceptible to fluctuations for various reasons. The findings of the interview data indicated that the most important factors that affected her motivation and affective states were her lesson tasks, mood, and classmates. Although she expressed her enthusiasm to learn English and described it as a goal, she was not driven to achieve her goal. This might be due to her not having any proximal sub-goals to learn English. Learning English was in her distant future. The excerpt below shows why she does not see learning English as a priority in her life:

My priorities now are to have high grades in all of my lessons. I have four years to improve my English. I think it would be better for me to focus on English on the third grade. However, I also try hard to do my best in English lesson this term. I sometimes check what I have learned. If I realize improvement in any competences of English, it gives me more energy. However, when I realize the inadequacies in my English, I get easily demoralized.

She further reported that she watched language learning videos, and read books about language learning at the beginning of the term. However, after several weeks, she rarely did the activities related to language learning because of the heavy work load in her first year tertiary level program at the university.

In summary, the interview data indicates that she had few characteristics attributed to a learner experiencing a DMC. However, what is unclear is what the other things she desired or needed to have had in order to have been caught up in a DMC state.

### 3.2.1. Betül's patterns of motivational and affective states changes

The findings of the self-plotted motigraph revealed that Betül's short-term motivation during the lessons was susceptible to change. Figure 2 below illustrates Betül's patterns of fluctuations in motivation and affective states.

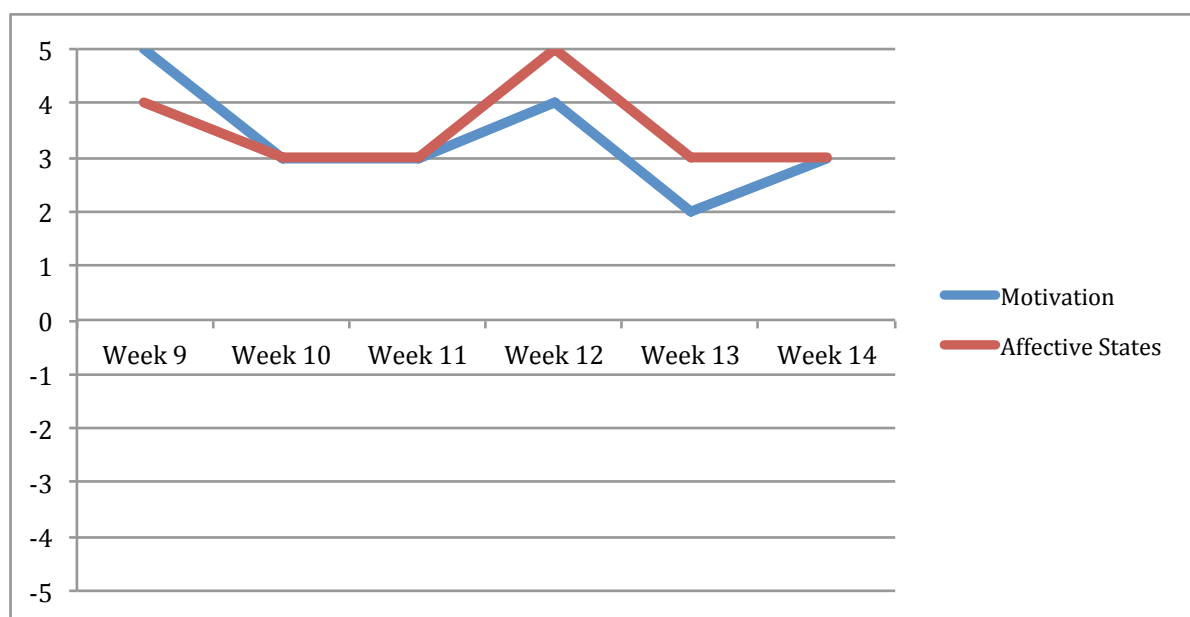


Figure 2. Betül's patterns in fluctuations of motivation and affective states.

The results of the self-plotted motigraph data indicate that Betül's motivation started considerably high, went down to a slight degree in weeks ten, eleven and fourteen, increased slightly in week twelve, and then got the lowest average mark in week thirteen. Weeks ten and eleven were the times in which Betül got her comprehensive marks of her first and second midterm exams in the class up to those points. In week thirteen, the topics covered so far were reviewed and reflected upon, after that it went on by enabling students to focus on the exercises on the topics covered in the first term of the academic year. It is clear that the rise in motivation in weeks nine and twelve is due to tasks performed in the classroom. She explained the rise in her motivation by stating that:

At first, I seemed to learn English for the first time, so I was excited and enjoyed in the lessons. I felt good. In some lessons, some topics seemed to be difficult so my motivation in those weeks slightly decreased. Also, at times when I was ill, my motivation and affective states decreased.

These findings imply that for Betül, having distant future goals has some demotivating effects

on her long-term motivation to learn English. In order to sustain her long-term learning motivation to become a highly proficient user of English, she needs some meaningful answers as to why she needs to study English now and in the future. As regards the changes in her motivational intensity, identified during single lessons as well as from one class to the next (i.e. the short-term changes), they were found to be dependent on the focus in the lesson, the type of activities/tasks in the lesson, the duration of the lesson, the transition from one phase of the lesson to the next, the cooperation with other students as well as the significance of the issues covered and their connection with the final examinations. Additionally, when asked to do the course book activities (i.e. the paper-based ones) her level of motivation proved to be more susceptible to changes.

#### **4. Conclusion and Discussion**

In summary, the aim of this study is to assess the extent to which the core components of the DMC construct conceptualized by Dörnyei and his associates (2013, 2014) can explain highly motivated language learners' stories, and to gain an understanding on the patterns of fluctuation in motivational and affective states of the highly motivated language learner who experiences a DMC and the highly motivated language learner who has not been caught up in a DMC. The findings of this study confirm the construct of the DMC concept. All the core dimensions of DMC concept and their elements were found to exist in Mira's case, in line with the findings of Tina's DMC experience in the study by Safdari & Maftoon (2017) and Tuba and Zahra's DMC experiences in the study by Zarrinabadi & Tavakoli (2017). Though in Tina's DMC experience, it was reported that directionality and goal-orientedness seem to be the most influential factor (Safdari & Maftoon, 2017), the most potential influence of the DMC components on Tuba and Zahra's DMC experiences is not obtained from the study by Zarrinabadi & Tavakoli (2017). In the present study, during the data collection, forming a personalized meaningful crucial goal and creating a strong vivid vision seem to be the most influential components on her DMC experience. However, to what extent each component affects her DMC experience could not be obtained through conducting just one semi-structured interview. Mira experienced a sustained period of intense motivation as a consequence of creating and forming a strong vision of learning English. The existence of the well-defined personally meaningful and crucial goal and vivid vision could explain her never-ending energy towards her ultimate goal with high enthusiasm.

As to positive emotionality, Mira experienced a permanent period of positive emotionality because of her vivid vision and personally meaningful superordinate goal thoroughly influencing her emotions. She expressed no sign of fatigue or boredom while expressing her affective states during the semi-structured interview. On the contrary, she stated that she basked in every moment of this experience while engaging in all relevant tasks and activities related to her goal and never got bored even during the activities or tasks, which she had hated beforehand. Such a huge amount of positive emotions and energy toward the final goal again puts emphasis on the significance of the effectiveness of the goal-orientedness and novel vision, without which such highly positive feelings could not be explained. Though Henry et al. (2015) reported gradually emerging fatigue at around the end point when the individual feels that s/he is close to his/her goal, in Mira's case, an exceptionally high level of motivational surge has continued until the data collection finished. So, no fatigue or boredom was observed in her DMC experience.

Regarding the salient facilitative structure, Mira displayed all three elements. She was profoundly aware of every aspect of the experience and recalled the important moments of her experience. During the interview session and the academic year, her motivation was not

instantly faded away, rather it continued with over and above what she had in terms of energy and positive emotionality.

As the findings showed, in Mira's case, the DMC had all three core components and elements in line with Tina's case in the study by Safdari & Maftoon (2017) and Tuba and Zahra's cases in the study by Zarrinabadi & Tavakoli (2017); however, this was contrary to the findings of the study by Henry et al. (2015) in which no overt definition of the participants' initial long-term goals or personal visions of future selves was found out. Conversely, in the present study, in Mira's case, during the semi-structured interview, her explicit long-term goal and strong vision of learning English could easily be identified. While their findings give support to the validity of DMCs as a construct, the findings of the present study indicate that goal-orientedness and the existence of a personalized and tailored vision seem to highlight the directional nature of a DMC when compared to the differing patterns of Betül and Mira's changes in motivational and affective states. Thus, the existence of an exceptionally powerful surge of motivation over a long period of time can be verified with the presence of forming a strong vision. Mira accomplished having a clear well-defined personalized goal and forming a strong well-imagined personalized vision, as a result, both her short-term and long-term motivation and affective states were not susceptible to considerable change. Moreover, Betül managed to set up a goal of learning English as a part of another goal at the beginning of her tertiary level education. However, her goal of learning English was not a priority, and thus the well-defined goal and clear vision were not evident in her behavior and could explain her changes both in her short-term and long-term motivation and affective states. Though Betül was eager to establish some behavioral routines, she could not maintain them with a high degree of consistency and commitment. In line with these findings, Dörnyei & Kubanyiova (2014) also reported that a vision is not only a set goal or a simple dream, it is comprised of goals enriched with the addition of imagined realities and sensory elements. Therefore, the fact that Betül did not have a personally significant vision which resulted in her not having an exceptionally high motivational surge for her goal is not surprising. However, in order to understand the weight of each component, there needs to be a deeper investigation via follow-up interviews and questionnaires developed for this purpose which is also suggested by Alastair Henry (2017, personal communication) and Safdari & Maftoon (2017).

The results also showed significant difference between the patterns of fluctuations in Mira and Betül's motivational and affective states. In this study, Mira, who had an identifiable DMC, displayed a more stable pattern on the motigraph; however, Betül, the other highly motivated student, drifted aimlessly without a clear focus. Though this finding implies that being in a DMC affects all of Mira's short-term and long-term motivation, actions and affective states positively, Betül's not having an explicit long-term goal for her near future, establishing any proximal sub-goals, creating strong vivid vision of learning English, or establishing any behavioral routines have some negative effects on her short-term and long-term motivation, actions and affective states. However, what is unclear is that to what extent Betül needs each component of DMC and what the other things she desires or needs to have in order to have been caught up in a DMC state. Since there has not been enough research on both DMC and the dynamic aspect of DMC to grasp the whole picture of the DMC construct and its effectiveness on the patterns of both long term and short term fluctuations in motivational and affective states, there should be more research planned and conducted with learners from varying educational levels. It is also hoped that this little study will provide some useful insights to further research on DMC and will be beneficial for opening up an exciting research agenda to explore the dynamic aspect of the nature of DMC and its elements, and the weight of each of the components in diverse individuals and in diverse contexts.

The study has certain limitations and therefore provides little significant insight into the nature of the DMC construct or the value of getting to understand the patterns of fluctuation in motivational and affective states of learners who experience a DMC. The first one is that conducting just one semi-structured interview with the participating learners did not provide enough information on the weight of all components and the elements in Mira's DMC case or the factors that their patterns of fluctuation in motivational and affective states could be attributed to. Learner diaries could be used to provide more information about the reasons of the patterns of fluctuation in motivational intensity and affective states. However, a simple computer based diary collection software could be developed to reduce the risk of contempt and demotivation such paper based diaries might create on the part of students. Another limitation is that the study was not conducted in both terms of the 2016-2017 academic year, so the study doesn't provide information about the end point of Mira's DMC experience. The final point was not noticed during the data collection period. So, the present study could not shed light on this issue.

Although this small-scale study has certain limitations, there are also a number of attractive insights that might be expanded into future studies and taken into consideration to understand the DMC construct better and validate its theoretical tenets. Among the worth-stressing issues related to the DMC construct is how to measure the weight of each component in each unique DMC case. However, the assessment tools used so far in the DMC studies has nothing to say about this issue. Future line of research will need to delve into the nature and weight of the structural properties of DMCs in diverse individuals, contexts and communities. Researchers should also look for the potential influence of individual and contextual factors on the weight of the different components of DMCs and on the effectiveness of experiencing DMC. Another crucial aspect related to DMC studies, which should be taken into account, is that some individuals are more prone to be caught up in a DMC by their very nature. They have experienced DMC more than once while engaging in intense activities in pursuit of different goals, which is also expressed by Alastair Henry (2017, personal communication). To understand the reason why some people are more prone to experience DMC could provide more insight on the nature of the DMC construct and the core components of the DMC, and even about how to create such a situation to enable students to experience DMCs in the classroom atmosphere. Another crucial issue, which further studies should also deal with, is the pedagogical application of DMCs. They must pay more attention to finding proper ways of purposefully facilitating and creating DMC or DMC-like experiences with individual students or groups of students in the L2 classroom atmosphere.

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