Directed Motivational Currents: Optimal Productivity and Long-Term Sustainability in Second Language Acquisition

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Abstract

This thesis is concerned with the issue of motivational intensity and sustainability in second language (L2) learning through investigating a recently-conceptualised phenomenon theorised by Dörnyei and colleagues (Dörnyei, Ibrahim, & Muir, 2015; Dörnyei, Muir, & Ibrahim, 2014) and termed Directed Motivation Currents (DMCs). The phenomenon is characterised by intensity of engagement, sustainability of effort, and positive affect, in which individuals display highly motivated goal-governed behaviour and achieve outcomes exceeding expectations set at the outset. DMCs are postulated to represent the optimal form of long-term engagement.

The aims of this thesis were to investigate the DMCs in regard to their theoretical justification and empirical validation. The initial chapters present the argument for why the L2 motivation field needs a new motivational construct. It is posited that although aspects of DMCs are discussed in many existing theories, mainstream motivational psychology has not previously captured periods of motivational surges people experience in pursuit of valued personal visions. Accordingly, the main queries guiding this research were to examine what it was like to experience a DMC and what the motivational sources of such motivational drives were.

Deploying a phenomenological method of data analysis, exploratory qualitative in-depth interviews were conducted with a number of students who had experienced, or were experiencing, a DMC, whether individually or as part of a group. In addition to providing empirical validation for the DMC phenomenon, results revealed what conditions led to a DMC, what a DMC-cycle entailed, and how DMCs made use of a salient structure. The findings suggested that developing a facilitative structure immediately upon a DMC launch was key to the longevity of the current in part due to

the effect of behavioural routines and their role in ensuring continued engagement and protecting it from competing temptations.

The findings also implied the central role of positive affect in altering the perception of effort and rendering volitional self-control dispensable. As a result of eudaimonic happiness and a sense of growth, the participants experienced positive affect whereby effort was enjoyed and engagement was sustained until goal attainment. However, what accounted for most of the positive affect was not the pleasure of engagement itself or feelings associated with merely learning a second language. Rather, happiness was due to the sense that one was going through a transformational process in which one's image and identity, level of operation and skills, as well as one's entire personal entity was being developed. This somewhat indirect link between personal growth and happiness through L2 learning was seen as a new, promising, but challenging area of research.

The results also revealed that DMCs could be experienced by groups of learners and at various levels and timescales when combined energy was directed at a shared goal. Furthermore, it was argued that group DMCs were the ultimate form of group performance in large part due to their potential immunity from social loafing which prevents groups from functioning at their highest capacity.

In summary, empirical evidence presented in this thesis suggested that long-term motivational momentum in DMCs was the outcome of optimal aggregation of motivational properties that jointly enabled individuals and groups to operate at their highest levels and achieve outstanding results in a fast-track pathway towards goal attainment. While in a DMC, due to the impact of positive affect and a functioning structure, renewable motivational energy is utilised, which empowers long-term and self-propelled engagement without the need for volitional self-regulatory measures.

Once applied in L2 settings, DMCs are argued to provide an exceptionally powerful boost to language learners' motivation and performance.

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Chapter 1: Introduction

1.1 Background

For a decade and since enrolling in the English department, I was constantly being asked by people I knew from all walks of life about how to learn a second language, and fast. I thought hard about this question then and also throughout my teaching career. Yet, despite exploring through various second language (L2) learning theories, and research on methodologies and learning strategies, I was not convinced that an unequivocal answer existed, but that "it all depends"! No one seemed impressed with this solution. As I offered guidance on effective strategies backed by research, I came to realisation about two major issues—that are likely to apply to the majority of L2 learning settings as well. First, no matter how empirically valid, the efficacy of learning strategies is highly individual-specific. Second, the main problem that obstructs the L2 acquisition is not, or hardly, a methodological issue, but a psychological challenge. My evidence for the latter was the large number of enthusiastic students on the first day of many of the language courses for adults that I and other colleagues were teaching, only to see a handful of students enduring as the courses progressed into the final stages.

From that experience, I learnt that despite the initial passion for learning an L2, most learners suffer from a lack of motivation to maintain long-term engagement. One reason might be related to their inability in setting specific and linguistically-defined goals—versus the general aim of being proficient—whereby meaningful progress is made visible. However, the underlying hurdle seems to be more complicated and difficult to deal with. No matter how valuable one's goal is, motivation might "suffer unless ways are found to regulate it" (Ushioda, 2008, p. 26), meaning the need for the deployment of volitional control strategies.

Yet, students, especially adult learners, do not seem to be short of knowledge on self-control measures; they simply lack the ability or willingness to apply them on a regular basis. What they need therefore is empowerment so that they can endorse and own their learning and at the same time feel passionate about it—that is, they find it enjoyable. Unfortunately, educational psychology and second language acquisition (SLA) research have mainly dealt with enjoyment as a supplementary treatment, that is, adding fun activities so that they "provide a break from focused study" (Tomlinson & Masuhara, 2009, p. 646). In the L2 learning field, however, this view of enjoyment as a break from learning—versus being at a centre of learning itself—is not encouraging given the fact that learning an L2 needs motivational maintenance over a long period of time.

Back in late 2012 when I was starting the PhD programme, I was wholeheartedly interested in learning about L2 research on the link between motivation and enjoyment such as intrinsic motivation and flow (Csikszentmihalyi, 1988), with an eye on the state of the art research on teaching methodology and curriculum design. Luckily, at the time, my supervisor, Zoltán Dörnyei, had been thinking about a new motivational phenomenon, much similar to flow. That coincidence laid the way open for me to take part, along with him and Christine Muir, in developing, theorising, and terming what we later called the directed motivational current (DMC). To me, this was both an answer to my long-awaited quest on a motivational apparatus I was personally in dire need of, and also an exciting opportunity to lay the groundwork for not only a novel motivational concept, but a promising line of research. Since then, I have proudly been part of the pioneering research on the DMCs by co-authoring the very first publication (Dörnyei, Muir, & Ibrahim, 2014) on the DMC theory, co-writing a conceptual chapter on DMCs in reference to dynamic systems theory (Dörnyei, Ibrahim,

& Muir, 2015), and contributing with empirical data to the first book on DMCs (Dörnyei, Henry, & Muir, 2016). Moreover, I have recently published an empirical study on positive emotionality in DMCs (Ibrahim, 2016). Below I briefly discuss what the DMC theory is and why it matters.

1.2 Directed Motivational Currents

A DMC is a phenomenon in which one acquires and maintains a motivational surge over an extended period of time. It can also happen in a group of individuals who share a goal and make collective effort through motivational momentum which enables them to achieve more than what they had expected. DMCs are characterised by goal-directedness, motivational intensity, and self-propelled progress. Since DMCs feature motivational levels above what people usually exhibit, they are unique in intensity and perhaps less frequent in occurrence. However, it is likely that virtually every person has experienced a DMC whether it be a strict diet or a passion to learn the Highway Code in the hope of obtaining a driver's licence. While a number of personal and contextual factors may help initiate this drive, once it has started, a DMC maintains its current/momentum somewhat steadily until the goal is achieved after which motivation will go back to its normal, pre-DMC state. Therefore, being extraordinary in both quality and sustainability, a DMC can transform individuals and groups from one state and level of operation to another through increased productivity and unwavering dedication (see Chapter 2 for a detailed overview).

1.3 Significance

Directed Motivational Current is a newly-framed phenomenon, and as such, its foremost significance lies in its theorisation and introduction to the field. However, the mission of

this thesis is not to present DMCs as a phenomenon, but more ambitiously it aims to tackle a range of theoretical and conceptual issues in the L2 motivation field such as motivational sustainability, habitual and effortless learning, positive affect, motivational autopilot, and others. All these matters have received little attention in the field and therefore deserve detailed investigation. Since these issues are well embedded in why and how DMCs occur, the study of the DMC construct can stand as a new line of L2 motivation research in its own right.

As one of the very first comprehensive empirical investigations on DMCs, this thesis studies the phenomenon in depth and also as lived and experienced by a number of individuals and groups. Although limited by time and space, this project examines all the major components of the DMC theory. Nonetheless, in place of surveying what happens in a DMC, it focuses on how and why it happens. In other words, rather than reporting a few DMC cases, this thesis attempts to answer the question of how DMCs empower individuals and groups to expend an optimal level of motivational energy over an extended period of time. In doing so, this project makes use of rich empirical data collected from a variety of research participants from diverse ethnic and educational backgrounds. Moreover, this research utilises a number of methods of investigation such as retrospective in-depth qualitative interviews to gain rich and thick description of the phenomenon, and longitudinal methods to study follow-up cases to unveil the motivational and affective dynamics and unique trajectories of the participants. On the whole, the study of DMCs has three unique theoretical, methodological and practical implications: motivational sustainability, empirical predictability, and practical applicability, respectively.

1.3.1 Sustained Motivation

Research on motivation has for the most part focused on what attitudes or motives might increase the intensity of motivation. Motivational sustainability has received little emphasis, although most motivation theorists have acknowledged the significance of temporal aspects of motivation. A major motivation scholar, Bandura (1991), for example, has defined motivation as "multidimensional phenomenon indexed in terms of selection of pursuits from competing alternatives, intensity of effort, and persistence of exertion" (p. 158). And according to goal-setting theory (Locke, 1996), goals "affect performance by affecting the direction of action, the degree of effort exerted, and the persistence of action" with persistence referring to "directed effort extended over time" (p. 120). Whereas both these examples include persistence in their conceptualisation of motivation, the issue of persistence in long-term engagement has remained underdeveloped or at least one-dimensional; goal-setting theory, for example, has linked persistence to the need for setting plans and strategies. In that sense, in order to account for the issue of long-term motivation, the literature has mostly resorted to the concept of self-regulation, defined as "the strategies that students use to regulate their cognition" and "the use of resource management strategies that students use to control their learning" (Pintrich, 1999, p. 459).

However, the DMC theory is offering an alternative to the need for self-regulation and the resulting burden of self-control measures. Motivational maintenance in DMCs is achieved through the activation of motivational autopilot through a self-propelling structure in which regular engagement in DMC activities "becomes a smooth and self-evident part of the process, such as with the same semi-automatic process of brushing one's teeth before going to bed" (Dörnyei et al., 2014, p. 14).

Specific to L2 learning, focus on sustained motivation has also been very limited compared to other areas such as orientations (integrative or instrumental) and motivational types (intrinsic or extrinsic). This is in part because motivation has been conceptualised as a static state rather than a dynamic system liable to fluctuations over time, especially in the process of learning an L2 which occurs over an extended period of time (Dörnyei, 2000). Whereas rare attempts have been made to view motivation as a process (e.g. by Dörnyei & Ottó, 1998), the DMC builds on these models and extends the paradigm so that, instead of focusing on linear motives across pre-actional, actional, and post-actional stages, an extended period of engagement is seen as one motivational journey fuelled by a specific vision and maintained through a unique structural pathway.

1.3.2 Research predictability

The latest theorising assumes that motivation is a complex system and a result of dynamic interactions of multilayer elements which also change over time. Motivation can witness instability over a long term (Shoaib & Dörnyei, 2005), but also and more dramatically within short periods such as a single lesson, and that is due to "constant (re)appraisal and balancing of the various internal and external influences that the individual is exposed to" (Dörnyei & Skehan, 2003, p. 617). As such, according to dynamic systems theory (DST), there can never be replicability because the initial conditions are always different for each circumstance, and therefore, repeated findings cannot prove a certain outcome (Larsen-Freeman & Cameron, 2008). In such a chaotic and complex interaction of systems, predictability and thus researchability becomes almost impossible.

However, DMCs provide a powerful glimpse of predictability because once they are launched, they can maintain their currents until the goal attainment (Dörnyei et al.,

2015). DMCs resist or reduce variability around stability to the minimum whereby its effect is almost equalled to zero, and the possibility of a major future shift is not likely. Hence, DMCs can reduce the size of changes or their effects to a minimum so they do not influence the steadiness of the journey. For example, in a DMC, a change in certainty might occur without having a deep influence on one's overall confidence (Mercer, 2011). DMCs can therefore be seen as regulators of variability and thus producers of stability and predictability, even if temporal. And this very predictability offers a window for systematic investigation (see Dörnyei et al., 2015 for detail).

1.3.3 Practical implementation

Perhaps the main contribution of the DMC theory lies in its practical significance. Once in a DMC, an individual or group performs beyond the everyday motivational levels and achieves a remarkable outcome within a shorter period of time than otherwise. Therefore, whereas it may not substitute the motivational strategies L2 teachers are already familiar with and have successfully utilised, a DMC can be seen as an occasional treatment used to move inert students who are suffering from demotivation or to enthuse already-motivated students to increase performance and productivity.

Although the issue of how to systematically induce a DMC in an individual or group lies beyond the scope of this thesis, the practical aspects of DMCs have occupied a central place in the current investigation. Therefore, the results have been presented in two parts: two chapters on individual DMCs and one chapter on group DMCs. Moreover, a separate section in the discussion chapter has been devoted to the lessons learnt from this thesis that can be used to generate DMCs.

1.4 Research questions and organisation

As mentioned above, this thesis will not merely report a handful of DMC cases. Rather, through analysing a number of individual and group DMCs, it explores the phenomenon in detail to expand our understanding of how DMCs occur and how they dictate their unique powerfulness. To do this, the empirical analysis will focus in part on the main components of the DMC construct as theorised by Dörnyei and colleagues. Having said that, the main approach that has guided this research is rather exploratory so that the phenomenon is studied as lived and experienced by those who have gone through at least one DMC. As such, the thesis aims to present a thorough account of DMCs in regard to their components, features, and lifecycles.

The main research questions that guide this thesis are:

- Does the DMC occur as a motivational phenomenon as theorised by Dörnyei and colleagues?
- If so, what are the phenomenal properties of such an experience, and how does it differ from other experiences?

In order to answer these rather general questions, each chapter attempts to address a number of more specific queries which are ultimately necessary to reach an informed and scrutinised judgement in reference to the questions above. Below are the more-specific questions and the corresponding chapters that address them:

- Why does the L2 motivation field need a new motivational construct? In other words, what are the theoretical justifications for the DMC? (Chapter 2)
- How does the DMC construct relate to the existing motivational theories? (Chapter 3)
- How can we best empirically study the DMC phenomenon especially in the context of this thesis? (Chapter 4)

- What is the lifecycle of a DMC like, and how does it sustain motivational intensity in the long term? (Chapter 5)
- What is it like to be in a DMC, and what are the affective properties of such an experience? (Chapter 6)
- Can DMCs occur within groups? And how do group DMCs compare to individual DMCs and other forms of group performance? (Chapter 7)

In all of these questions, the research focus is on the DMC's properties that make it a motivationally intense and sustained experience. It is my reasoning that the combination of these two characteristics makes a DMC a unique experience and thus a compelling new line of research. Although the chapters (5, 6, and 7) that present empirical results contain discussion sections addressing the chapter-specific questions, Chapter 8 combines the summary of the main findings and their interpretations and implications. Whereas the empirical chapters focus on within-DMC issues, Chapter 8 discusses the main findings of this research in respect to our existing knowledge about the DMCs, and the unique contribution of this thesis to both fields of L2 motivation and educational psychology. To do so, the main findings are summarised and necessary comparisons and references to the literature are made.

Chapter 2: From the Integrative to an Integrational Model of L2 Motivation

2.1 Introduction

This chapter reviews in general terms the main theoretical trends that have dominated the L2 motivation field from its rise to the most recent lines of thought. The aim is to explain the major areas that the field has been focusing on and those it is still lacking around which the central topic of this thesis lies. In doing so, not only do I illustrate the position of the DMC as a new motivational construct, but I also, and perhaps more importantly, answer the question of why the field is in need of incorporating and building on a new line of research.

As I review the literature, it will become clear that the central issue with the L2 motivation field is not the scarceness of theories and models. On the contrary, it might indeed be the abundance of such frameworks and often a tendency to broaden the existing theories to include too many variables. This is however to be expected given the complexity of motivation itself and its conceptualisation in a variety of disciplines (Dörnyei, 2001; Dörnyei & Ushioda, 2011).

An initial example of this complexity is that scholars do not agree on a single, linear definition of motivation. The term is probably defined and understood rather differently by different people, and a major challenge of the mainstream psychology of motivation has been the lack of consensus of how motivation is defined (Kleinginna & Kleinginna, 1981), so much so that some psychologists have called for abandoning the concept (Dewsbury, 1978) or replacing the term in the psychological databases (Walker & Symons, 1997). The reason for this, as elucidated by Dörnyei and Ushioda (2011), is that due to the complexity of motivation as "the potential range of influences on human

behaviour" and a countless number of possible motives, no motivation theory has dared to make an attempt "to offer a comprehensive and integrative account of all the main types of possible motives" and that "devising an integrative 'supertheory' of motivation will always remain an unrealistic desire" (p. 4).

Nevertheless, most scholars would agree that motivation is one of the most prominent individual difference variables (Dörnyei, 2006) and as such a vital predictor of behaviour and academic achievement (Abouserie, 1995; Pintrich, 1999; Wigfield & Eccles, 2000) including learning another language (Dörnyei, 1994a, 2001; Noels, Pelletier, Clément, & Vallerand, 2000; Skehan, 1991). Language teachers are intuitively familiar with such belief inasmuch as they use the 'motivated' and 'successful' adjectives synonymously for good language learners since for learning an L2, which is a lengthy and mostly tedious process, "the learner's enthusiasm, commitment and persistence are key determinants of success or failure" (Dörnyei, 2010a, p. 74).

If we accept the notion that "without motivation, success will be hard to come by" (Ushioda, 2008, p. 19), the fundamental question is, how does motivation, high or low, predict language learning achievement? In other words, what is the mechanical role of motivation in enhancing learning behaviour? To make the matter more specific to the second language acquisition (SLA) field, it is important to raise that question in relation to the peculiar role of motivation in learning a second language versus other achievement areas; that is, what is the unique contribution of L2 motivation to the SLA field, and to what extent does the study of motivation account for explaining the individual differences learners display while on the course of acquiring a new language? To answer these queries, it is necessary to review the L2 motivation research in order to not only understand what the major theories have been about, but also recognise what

else needs to be included in the current and future research agenda of the scholars in the field.

2.2 Rise of L2 motivation research; integrative motivation

L2 motivation research is a relatively young field, as its actual emergence goes back to about half a century ago with the works of Robert Gardner and Wallace Lambert who, influenced by the English-French dichotomy of Canada, believed that a main drive leading people to learn an L2 is the goal of integrating into the target ethno-linguistic cultural community. In their seminal joint article at the Canadian Journal of Psychology/Revue Canadienne de Psychologie, the two authors argued that besides the "linguistic aptitude", motivation and interest might also play a role in acquiring an L2, because linguistic aptitude is liable to major variation from one situation to another (Gardner & Lambert, 1959, p. 266). In that same article, the authors relied on the first language (L1) acquisition research to make their claim about people's desire in the target culture:

> We argue that an individual acquiring a second language adopts certain behaviour patterns which are characteristic of another cultural group and that his attitudes towards that group will at least partly determine his success in learning the new language (Gardner & Lambert, 1959, p. 267).

Later, Gardner continued his research on his integrative motive propositions and he and his associates in Canada conducted a number of studies resulting in Gardner's socio-educational model (Gardner, 1979, 1988) which is based on integrating a number of variables thought to lead to L2 achievement. Gardner developed the

Attitude/Motivation Test Battery (AMTB; Gardner, 1985) to measure four sets of variables of the model (Masgoret & Gardner, 2003):

-Integrativeness, which includes attitudes toward the second language group, attitudes toward the L2, and integrative motivation,

-Attitudes toward the learning situation, which mainly includes evaluation of the course and of the teacher,

-Motivation, which refers to motivational intensity, attitudes toward learning the L2, and desire to learn the L2, and

-Motivational orientations, which are integrative and instrumental orientations.

Gardner's model assumes that both aptitude and motivation are the major individual differences that predict L2 learning achievement and that attitudes and motivation toward the L2 community are specific to L2 learning (versus other types of learning) motivation; that is, "the nature of language acquisition may be such that attitudes are implicated in achievement more than is true for other subject areas" (Gardner, 1985, p. 42). As such, in addition to the ability to learn the linguistic features of the L2, learners need to "identify with members of another ethnolinguistic group and to take on very subtle aspects of their behaviour, including their distinctive style of speech and their language" (Gardner & Lambert, 1972, p. 135). In the model, which outlined the first phase of L2 motivation labelled social-psychological (e.g. by Dörnyei & Ushioda, 2011), these social attitudes toward the L2 community paired with educational attitudes such as attitudes toward the teacher and course constitute the two sets of variables with attitudes toward learning the L2 and attitudes toward the L2 community being the subject of most focus and research of the initial phase of L2 motivation (Gardner, 1985).

In further elaborating on his model, Gardner suggested that both attitudes toward the learning situation and integrativeness indirectly predict L2 achievement through predicting motivation (Masgoret & Gardner, 2003), and that motivational orientations are only reasons for why learners want to learn an L2. Whether it is an integrative or instrumental orientation one has, their relationship with L2 achievement is mediated by motivation, as with integarativeness (Gardner, 2005).

Despite the pioneering and major influence of the socio-educational model and a vast number of empirical studies by Gardner and his associates (mostly in Canada) supporting the major variables of the model, it received criticism about its predictive power and validity. Au, in 1988, for example, reviewed the model against the evidence found in the literature up to that point and concluded that the hypothesis of the positive relationship of the integrative motive with L2 achievement lacked generality. Furthermore, Gardner's notion that integratively-motivated learners might be more active as they get involved in L2 learning behaviours beyond just the classroom (Gardner, 1985) was based on weak evidence due to "serious methodological weakness" in the studies conducted about that hypothesis (Au, 1988, p. 91).

Other objections to the model were later presented in the form of its limitations. Skehan (1991) for example, noted that Gardner's contribution "has been of considerable importance in the field of motivation (both for his findings and the methodological standards he has set), but the conception of motivation involved is limited compared to the range of possible influences that exist" (p. 280). Another voice came from Crookes and Schmidt (1991) who argued that L2 motivation had been limited by too much emphasis on attitudes and other social psychological aspects which would not "do full justice to the way SL [second language] teachers have used the term motivation" (p. 469). They also noted that the model lacks "validity in that it is not well-grounded in the

real world domain of the SL classroom, nor is it well-connected to other related educational research…" (p. 470). Similarly, Dörnyei (1994a) noted that even though Gardner's model included an educational dimension, the main focus was on "general motivational components grounded in the social milieu rather than in the foreign language classroom" (p. 273).

It is important to mention that the new L2 motivation researchers in the beginning of the 1990s did not reject Gardner's theory altogether. Dörnyei (1996), for example, makes the point that the new attempts were not to be interpreted as attacks on Gardner's theory, but were aimed to "broaden the scope of language learning motivation and to increase the educational potential of the theory by focusing more on motivation as reflected in students' classroom learning behaviour" (p. 71). One of the limitations of that scope was in relation to the location of the pioneering research (i.e. Canada) which had a paramount impact on founding the original assumptions of the integrativeness of French to the Anglo-Canadians. However, as the majority of L2 learning occurs perhaps in contexts where the motive of integrating into the L2 cultural community has little relevance (Dörnyei & Csizér, 2002), and in a globalised world where both the tendency and need for learning English are in great part based on functioning in this new globalised environment, "the desire to 'integrate' loses its explanatory power in many EFL contexts" (Lamb, 2004, p. 3; see also Ushioda & Dörnyei, 2009).

As a result, researchers began calling for the expansion of the model. Oxford and Shearin (1994), for example, called for expanding the current L2 motivation research by considering new pathways and new variables that had not been considered in Gardner's traditional social psychological model (also see Oxford, 1996). The call for reopening, broadening and considering new pathways gave rise to a new era in the field

which marked a transitional age dubbed a motivational renaissance (Gardner & Tremblay, 1994), the modern age (Gardner, 2010), and "the cognitive-situated period" (Dörnyei & Ushioda, 2011).

2.3 Cognitive-situated period

The second phase which begins from early 1990s started in part as a result of the need for a new research framework that was more compatible with the dominance of cognitive psychology in mainstream motivational psychology and a desire to focus on L2 learning in specific situated contexts. Despite presenting the new era of being a move towards expansion, it was indeed a completely different, new line of L2 research; that is, by then "the social psychological line of enquiry had perhaps run its course and that new and alternative research perspectives were needed to revitalise and refocus the L2 motivation field" (Dörnyei & Ushioda, 2011, p. 46). In addition to the limitation of the attitudes speculation, the need for the refocus was also due to the realisation that L2 motivation needed to be directed at aligning concerns of both researchers and L2 teachers alike (Ushioda, 2008); therefore, this period is also called the "educational shift" (Dörnyei, 1998, p. 124).

This period's works focused on two major directions: deploying themes from the cognitive motivational psychology and adopting a "more situated analysis of motivation in specific learning contexts" (Dörnyei & Ushioda, 2011, p. 46). Thus, the period witnessed a wide scope of research informed by goal and expectancy-value theories (e.g. Tremblay & Gardner, 1995), need theories (e.g. Oxford & Shearin, 1994), self-determination theory (e.g. Noels, 2001; Noels, Pelletier, Clément, & Vallerand, 2000), attributional theories (e.g. Dörnyei, 1990; Skehan, 1989; Ushioda, 1996), task-based learning and motivation (e.g. Crookes & Gass, 1993; Long & Crookes, 1992), and

language learner autonomy (e.g. Allwright, 1990; Dam, 1995; Little, 1991), to mention some of the dominant trends.

A major framework was presented by Dörnyei in 1994 which comprised three levels: language level, learner level, and learning situation level. The integration of these three levels was an attempt to include all the L2 motivation variables that research had been focusing on thus far in a single and more comprehensive model. Therefore, this framework included a list of components specific to each level, such as integrative and instrumental motives, need for achievement and self-confidence, and a number of situation level variables such as interest, satisfaction, relevance and other classroom-related factors (Dörnyei, 1994a). To Dörnyei, a motivational framework needed to incorporate and take into account all these levels jointly in order to reflect the multiple layers of motivation as change at one level might affect the overall motivation.

A similar attempt to aggregate a large list of motivational variables in a single framework was proposed by Williams and Burden (1997) who focused on both individual-specific and social parameters. They listed the variables under two categories: internal factors (such as intrinsic interest, value, and attitudes) and external factors (such as the effect of significant others, environment, and the broader context).

In general, this era of L2 motivation was under the influence of and in response to two main issues at the time: First, as new researchers criticised Gardner's model, they mainly did so in terms of its limitations and that led to attempts to build on and expand Gardner's model mainly through adding more motivational variables and lists (e.g. Dörnyei, 1994a; Tremblay & Gardner, 1995). Secondly, as mentioned above, in order to bring the field in parallel to the cognitive dominance in the mainstream motivational psychology, more cognitive (such as goals, needs, and values) variables became the agenda of the era's research. As such, most of the works and models in these years

centred on incorporating new motives (e.g. self-efficacy, goal salience) and investigating and comparing among cognitive variables (e.g. intrinsic or extrinsic goals). This trend then led to researching L2 motivation with regard to initial goals and motives and goal values and expectations with very little focus on long-term motivational maintenance. As a result, researchers continued to rely on large samples and quantitative methods (e.g. Coleman, 1996; Dörnyei & Clément, 2001; Schmidt, Boraie, & Kassabgy, 1996).

By this time, however, some L2 motivation scholars began realising that in the query for uncovering what might matter more than goals or attitudes, the motivation theory needed to focus on the temporal aspects especially when the behaviour in question is learning a second language which might entail a lengthy process rather than simply setting up a goal or making a decision. This realisation was in part initiated by research of that time on task-based methods in L2 teaching (e.g. Long & Crookes, 1992; Willis, 1996) and task motivation (Julkunen, 1989, 2001) which, in place of general motives and goals, focused on motivation for engagement in the process of a single L2 learning task (Dörnyei, 2002).

2.4 The process-oriented approach

Thus, the process-oriented phase was brought about from the notion that by now a new perspective was required to capture the temporal elements of the L2 learners' motivation as a dynamic process taking an extended period of time rather than a single task. Major researchers behind this move were Ushioda (1996), Williams and Burden (1997) and Dörnyei and Ottó (1998).

A pioneer in introducing qualitative research into the L2 motivation field, Ushioda (1998) conducted longitudinal research on Irish learners of French, which

resulted in findings supporting the notion that motivation was influenced by L2-learning experience as much as—or even more so—by future goals. Based upon this new, temporal conceptualisation, she called for "a more introspective type of research approach" to capture "motivational flux rather than stability" and "to explore qualitative developments in motivational experience over time, as well as to identify the contextual factors perceived to be in dynamic interplay with motivation" (Ushioda, 1996, p. 240-1).

Two other scholars, Williams and Burden (1997), also displayed the process-orientedness of motivation through presenting a model that included both initial motives and maintenance motivation. They conceptualised motivation to be more than the initial stages of motives and decisions to engage in L2 learning; in order for L2 learning to be achieved, one needs to sustain the effort. Their model was a crucial step in seeing the significance of not only triggering motivation but also keep-guarding it in the face of temptations and obstacles.

These two attempts were then enhanced by a more mature and comprehensive model presented by Dörnyei and Ottó in 1998 who based their model on the works of Heckhausen and Kuhl (1985), especially their theory of action control which takes into account how goals are formed and how they are implemented. Dörnyei and Ottó's (1998) model focused on three sequential sets of motivational stages: preactional, actional, and post-actional (see Chapter 3 for a more detailed account). What is important to mention here is that, in both the theory of action control and the process-oriented approach, the focus is on a "set of processes in charge of action maintenance, that is, the active use of action control strategies to protect dynamic (i.e. ongoing) behavioural intentions" (Dörnyei & Ottó, 1998, p. 46). Thus, motivation is conceptualised as a process, which among others concerns self-regulatory strategies to

maintain motivation over the course of learning an L2. Although it was a significantly advanced model of L2 motivation thus far, the approach was undermined by the limitation and the lack of "appropriate research methods and tools" to empirically build and expand the model (Dörnyei & Ushioda, 2011, p. 67). However, the approach was helpful in expanding the already-existing line of L2 research on self-regulation and motivational strategies (Oxford, 1990; Ushioda, 1998).

2.5 Motivational self-regulation

Research on self-regulation has been a dominant area in educational psychology for over two decades (Schunk & Zimmerman, 1994). In simple terms, self-regulation refers to the "students' use of various cognitive and metacognitive strategies to control and regulate their learning" (Pintrich, 1999, p. 460). It aims at discovering the ways through which "students become masters of their own learning processes" (Zimmerman, 2008, p. 166). The rationale for self-regulation research is that the presence of intentions or even desires cannot have much impact on motivating learners to achieve their goals without "the capacity for exercising influence over their own motivation and behavior" (Bandura, 1991b, p. 249).

Self-regulation theory seems to be capable of offering a concrete set of methods, plans and mechanisms whereby learners are not only receivers of knowledge but proactive participants and even owners of their own learning (Frese & Altmann, 1989). This is achieved through not merely processes of goal-setting, strategy deployment, and monitoring one's progress and efficacy (Zimmerman, 2008), but also empowering the learners to be able to manage and utilise their cognitive, motivational, and emotional resources in the service of supporting their self-regulated learning (Bell & Kozlowski, 2008). As such, a self-regulation programme is considered a learner-centred approach

(Alexander & Murphy, 1998) in which learners are empowered to control their own learning. This empowerment bears more significance for adolescent and adult learners who are more liable to suffer from low self-esteem and fluctuations in motivation (Cleary & Zimmerman, 2004).

Self-regulation is in many ways considerably relevant to L2 motivation, because L2 acquisition requires a relatively long period of time (in many cases, a number of years), a great deal of time and effort, and the steady rise of cognitive capabilities to deal with the rising challenges associated with acquiring advanced levels of linguistic skills (Ushioda, 2008). Therefore, successful L2 learners are thought to be the ones who learn to maintain their motivation and emotions (Hurd, 2008) as one's motivation "will suffer unless ways are found to regulate it" (Ushioda, 2008, p. 26). These ways are the development and use of learning strategies which need to be consciously utilised along the entire process until the achievement of the final goal.

Research on self-regulatory strategies has been conducted by a number of L2 motivation scholars in the 1970s (e.g. Naiman, Frohlich, Stern, & Todesco, 1978) and the 1980s (e.g. Oxford, 1989; Rubin, 1981), but was fuelled in major part by the educational shift in the 1990s (Dörnyei & Ushioda, 2011). For example, a book by Dörnyei (2001, p.135) proposes a "motivation-sensitive teaching practice" in which a set of 35 motivational strategies are discussed to provide L2 learners with a supportive and motivational environment, and then ways to generate initial motivation and maintaining and protecting motivation are suggested. Furthermore, the book devotes a chapter on strategies that L2 learners can be taught to acquire in order to have the appraisal and positive self-evaluation skills. Another similar contribution is that of Ushioda (2003) which centred on learner autonomy and positive thinking through using teacher feedback to promote learner self-awareness, because "[f]ailure to recognize the

self as agent in controlling thought and thus motivation can lead learners to become trapped in negative patterns of thinking and self-perceptions, with detrimental consequences for their motivation" (Ushioda, 2008, p. 27).

Despite the recognition of the importance of self-regulation for L2 learning, research on L2 self-regulation is scarce (Ushioda, 2008), compared to research on theoretical aspects of L2 motivation; that is, the focus has mainly been on motivation rather than motivating (Dörnyei & Ushioda, 2011), a trend becoming more apparent in the last decade. For example, we know little about the typical strategies good L2 learners usually use, and even if we do, we have minimum knowledge on how good learners "choose the right strategy for the right occasion" (Skehan, 1991, p. 288).

Nonetheless, having little research is not the only problem facing self-regulation. A serious challenge with self-regulation is that some learners cannot make use of motivational strategies (Rheinberg, Vollmeyer, & Rollet, 2000); that is, certain learners lack the ability to remain on a task or continue their engagement, mainly because they lack volitional control (Kuhl, 1987). Others might lose interest in the specific task at hand as a result of individual differences on how they perceive the activity-related incentives versus the final consequences of engagement (Schiefele, 1999). In order to find solutions for these issues, some researchers focused on promoting motivational aspects intrinsic to the task itself such as cultivating enjoyment in learning and skill acquisition (Schmidt & Savage, 1994). Externally regulated motivation can be useful for short-term goals only; therefore, learners need to be taught not only self-regulatory strategies, but more importantly how they can internalise L2 learning goals so they can maintain their motivation from within (Ushioda, 2008).

A significant question now is: Can self-regulation predict L2 motivation? There might not be a simple answer to this question simply because of differences in

perspective and judgement. However, whereas differences in opinion is more dominant around which self-regulation models are more effective than others (e.g. Schunk & Zimmerman, 1994) and how learners are trained to deploy individually-specific strategies for their own learning, the clear message seems to be that "becoming an active learner is a difficult and stressful process, demanding a lot of endurance, belief, and self-confidence" (Simons & De Jong, 1992, p. 342). Research on self-regulation has also been encountered with the caution that "optimism that teaching students' various learning strategies would lead to improved self-regulated learning has cooled with mounting evidence that strategy use involves more than mere knowledge of a strategy" (Zimmerman, 1990, p. 9).

It is therefore no surprise that in many cases and contexts, self-regulation simply falls short of expectations (Baumeister, Heatherton, & Tice, 1994). According to Baumeister and Heatherton (1996), self-regulation fails due to people's failure to abide by the three main ingredients of self-regulation: setting standards/goals, self-monitoring, and inability to bring about desired change. However, the failure to achieve the three elements is caused by one of three possible challenges: First, each person's self-regulatory strength is characterised by being a limited resource and therefore one is unable to regulate all their behaviours and circumstances at once; second, people fail in their self-regulation because it is difficult for them to act promptly and then manage their attention; finally, people fail to place their awareness beyond the immediate stimuli, that is, failure in delaying gratification.

2.6 From self-regulation to the L2 Motivational Self-System

In order to broaden the scope of L2 motivation research, Dörnyei (2005) introduced a new approach that links L2 motivation with the 'self', called the L2 Motivational Self

System (L2MSS). He argues that his new model offers a major reformation because it incorporates both dominant 'self' theories in mainstream psychology and all the previous research conducted in the L2 motivation field thus far (Dörnyei, 2009a). Despite the fact that the main part of his model is attributed to a theory presented in psychology in mid 1980s, Dörnyei has argued that the L2MSS was the result of a paradigmatic shift in which L2 motivation was being "radically reconceptualised and retheorised" in the light of sociolinguistic and political changes of the first decade of this century that brought a new reality of global identity, World English varieties, and Global English (Ushioda & Dörnyei, 2009, p. 1) leading to the failure of the original integrative model to explain L2 motivation (Lamb, 2004)—despite some voices who have argued that both the L2MSS and integrative motivation perspective are indeed complementary to one another (MacIntyre, MacKinnon, & Clément, 2009). Also, the L2MSS represents an unprecedented addition to self-regulation research in that it operates in conjunction with and supports self-regulatory processes.

The model is built on the theory of possible selves by Markus and Nurius (1986) who saw a future person's self-concept to be the function of three current self-knowledge aspects: what one might become, what one would like to become, and what one is afraid of becoming. These future self-knowledge aspects in turn determine one's motivation, but also one's desires and aspirations. In that sense, one's current motivation is believed to be the function of one's current cognitive processes in imagining one's 'self' and 'identity' in the future (Henry, 2010). As such, possible selves operate as "future self-guides", "reflecting a dynamic, forward-pointing conception that can explain how someone is moved from the present toward the future" (Dörnyei, 2009a, p. 11). Accordingly, although people vary in the degree of vividness in their possible selves (Oyserman & James, 2008), these future self guides represent all

the hoped-for selves and feared selves in the mind of an individual (Murru & Ginis, 2010).

The idea of possible selves was based on an earlier theory developed by Higgins (1987) according to which motivation is the effect of two future selves, which he called ideal self and ought self; the former represents these attributes that an individual would ideally like to possess in the future, and the latter includes the attributes that one thinks one ought to have based on family or society's opinions or norms (also see Higgins, 1998). Therefore, ideal self represents one's hopes, wishes, fantasies, and aspirations, whereas ought self represents one's sense of social or moral responsibilities or expectations.

In order to explain the motivational power and mechanism of the possible selves, Higgins (1987) proposed the self-discrepancy theory which postulated that when one sees and compares between one's current and desired selves, one feels motivated to reduce the discrepancy between the two selves and this will lead to motivated behaviour. Whereas both ideal and ought self guides play a role in motivating behaviour, their motivational functioning differs in that the ideal guides "have a promotion focus, concerned with hopes, aspirations, advancements, growth and accomplishments; whereas ought self-guides have a prevention focus, regulating the absence or presence of negative outcomes associated with failing to live up to various responsibilities and obligations" (Dörnyei & Ushioda, 2011, p. 83).

Dörnyei (2005) constructed his L2MSS on these two (ideal and ought) self guides but also added a third component, L2 learning experience. In his model, ideal L2 self is the "L2-specific facet" of a learner's "ideal self"; ought-to L2 self represents extrinsic reasons for learning an L2; and L2 learning experience "concerns situated, 'executive' motives related to the immediate learning environment and experience (e.g.

the impact of the teacher, the curriculum, the peer group or the experience of success)" (Dörnyei & Ushioda, 2011, p. 86). The L2 learning experience was added to reflect and include the research conducted during the educational shift of the 1990s which had focused on classroom and task specific motivation. Also, the future self guide was seen as not comprehensive enough as for a number of L2 learners "initial motivation to learn a language does not come from internally or externally generated self images but rather from successful engagement with the actual language learning process, for example because they discover that they are good at it" (Dörnyei & Ushioda, 2011, p. 86).

Even though the L2MSS was mainly triggered by the dissatisfaction with the integrative model, it is fair to say that the L2MSS is in some ways an advanced reconceptualisation of the integrative motivation. This is evident in the fact that L2MSS was in great part introduced into the field as a result of conducting a large scale, longitudinal study on Hungarian L2 learners' attitudes towards five languages (Dörnyei et al., 2006). In that study, the integrative variable "played a principal role in the extent of a learner's overall motivational disposition", leading to the conclusion that "this factor actually tapped into a broader dimension, the learner's 'ideal L2 self', and thus the link was created with L2 motivation and future self guides" (Dörnyei & Ushioda, 2011, p. 85-86). Later studies on the relationship between integrativeness and ideal L2 self "produced average correlation" between the two, "leaving no doubt that the two concepts are closely related" and "instrumental motivation" can now be interpreted in terms of "two distinct types, one relating to the Ideal L2 Self, the other to the Ought-to L2 Self" (Dörnyei & Ushioda, 2011, p.87-88; see also Dörnyei, 2009a).

On the other hand, despite the significant step of the L2MSS to include learning experience as an additional element to the original self-discrepancy model, little research has been conducted on its role either on its own or in relation to L2 ideal self

(Thompson & Vásquez, 2015). The same is particularly true in regard to the ought-to L2 self which "has been much less discussed and theorized" to an extent that it has sometimes not been included in studies on L2MSS, and when included, it has not been found to be effective enough in producing motivation. Since the ideal L2 self seems to be the central and leading predictor of motivation and also the main component of the L2MSS, this implies "both a need for a reexamination of the framework and the possibility that different data sources drawn from different learning contexts affect findings regarding motivation" (Thompson & Vásquez, 2015, p. 160).

Thus, the active and dominant component of the L2MSS is its ideal L2 self element (Munezane, 2015), and despite some studies suggesting otherwise (e.g. Kim & Kim, 2011), there has been enormous validation and support for the model in the last decade (e.g. Csizér & Kormos, 2009; S. Ryan, 2009; Taguchi, Magid, & Papi, 2009), accounting for as high as 40 percent of the variance (Dörnyei & Ushioda, 2011). Yet, the important question is, how does the L2MSS lead to motivated behaviour? That is, what is the mechanical functioning of the model in regard to initiating and sustaining motivation? In what ways does it offer more than the previous models such as the integrativeness and other cognitive models of the 1990s? Also, how do the future desires, hopes, and aspirations (as theorised by Markus and Nurius, 1986) translate into actual motivated action?

It has been postulated that the possible selves theory functions to increase motivation by serving as "a source of behavioral standards against which current views of the self are compared, and discrepancies between these two views are rectified through behavior change" (Murru & Martin Ginis, 2010, p. 540). This desired behavioural change, however, does not seem to happen automatically (Dörnyei, 2009a; Oyserman, Bybee, & Terry, 2006). Rather, possible selves can only motivate the

individual through the process of self-regulation; that is, "motivation is the conscious striving to approach or avoid possible selves in order to achieve one's inner-most potential" (Macintyre et al., 2009, p. 46). Therefore, for possible selves to be powerful, an individual needs to have his/her self-regulatory processes activated (Hoyle & Sherrill, 2006; Murru & Martin Ginis, 2010). According to Oyserman and James (2008), it is not sufficient for possible selves to be detailed, but they also need to be associated with a set of strategies that can activate self-regulation; therefore, "an increase in self-regulatory efficacy is a viable mechanism by which possible selves exert their influence on behavior" (Murru & Martin Ginis, 2010, p. 540).

Despite the strong link between possible selves and self-regulation, they differ in the way they function at the process level. Self-regulation relies on cognitive and metacognitive processes such as goal-setting and monitoring one's progress against standards or criteria (Pintrich, 1999). However, "possible selves are explicitly related to a long-term developmental goal involving goal setting, volition (via adherence to associated schemas), and goal achievement, but are larger than any one or combination of these constructs" (Pizzolato, 2006, p. 58). In other words, possible selves are "self-relevant, self-defining goals that provide incentive for action", regulating behaviour "through self-identification with the goals or the integration of the goals into the system of self-determined goals" (Miller & Brickman, 2004, p. 14). Therefore, the concept of future self guides does not equal the goal concept (Dörnyei, 2009a). On the contrary, the most distinctive feature of possible selves is that unlike cognitive goals, they represent a sensory element which transforms the cognitive processing of goals into experiential realities (Dörnyei, 2009a), that is, vision.

2.6.1 Vision

Dörnyei and Chan (2013) define vision as "the sensory experience of a future goal state, or in other words, a personalized goal that the learner has made his/her own by adding to it the imagined reality of the goal experience" (p. 454-55). Based on the L2MSS, there are three main aspects of one's future self that might impact one's current motivation and thus behaviour: image of what one might become, what one would like to become, and what one is afraid of becoming. Although any desired future state might generate vision, it is mainly when a future state is a personalised goal that the concept of vision is mostly associated with. A vision of an ideal self is believed to be more powerful than vision of an ought-to self as the former is the type of future self that has the potential to energise the current motivation in prospect of a personally meaningful and valuable goal.

Vision is based on the notion that our current engagement is influenced by how we envision our 'self' in the future, that is, future self. Once these imagery processes are activated, one feels the discrepancies one notices between his/her current and a future point (Higgins, 1987). In turn, these feelings lead the individual experiencing the vision to not only imagine but almost experience the future state, and also experience emotional reactions that might function as a motivating force (Pham & Taylor, 1999).

The mechanism by which vision or envisioning future states influences behaviour has been broadly investigated in the sport psychology field. Although the exact mechanism remains not fully clear, its effect is presumed to be through cognitive or motivational factors leading to evoking response systems (Paivio, 1985). One resulting impact seems to be that when people use mental imagery, they tend to spend more time practicing tasks, set higher goals and more realistic self-expectations, adhere

more to training programs, and generally display more persistence (Martin & Hall, 1995).

In Dörnyei's (2009a) L2MSS, the inclusion of imagery is central, as it is "one of the single most important factors within the domain of language learning: where there is vision, there is way" (Dörnyei & Kubanyiova, 2014, p. 2). This inclusion and claim about the power of vision comes from the belief that "the intensity of motivation is partly dependent on the learners' capability to generate mental imagery" (Dörnyei & Chan, 2013, p. 439). Its importance particularly lies in its assumed power not only to generate a sense of self-discrepancy and thus initial motivation, but also as "one of the highest-order motivational forces, one that is particularly fitting to explain the long-term, and often lifelong, process of mastering a second language" (Dörnyei & Kubanyiova, 2014, p. 4).

However, in theorising vision in L2 motivation, there is consensus that neither the L2MSS nor its envisioning element can mediate motivated behaviour in an automatic manner (Dörnyei 2009a; Oyserman et al., 2006), but rather through its effect on activating self-regulation (Dörnyei 2009a; Murru & Martin Ginis, 2010). In turn, this speculation has been seen as an advantage because it allows L2 teachers and educators to "consciously" generate and nurture vision in their learners (Dörnyei & Kubanyiova, 2014, p. 2). Therefore, a "vision-based approach" is not intended to replace or "invalidate" previous L2 motivational models including self-regulatory strategies (p. 3). On the other hand, it is also postulated that vision does not work for all learners (Higgins, 1987; Ruvolo & Markus, 1992), and for the learners that it could potentially be useful, "the intensity of motivation is partly dependent on the learners' capability (italics added) to generate mental imagery" (Dörnyei & Chan, 2013, p. 439) and to maintain a balance between hoped-for and feared selves (Oyserman & Markus, 1990).

Hence, vision alone does not seem to be sufficient even for L2 learners that have the capability to utilise it. Therefore, "future self-guides are only effective if they are accompanied by a set of concrete action plans" and "the ideal self needs to come as part of a 'package' consisting of an imagery component and a repertoire of appropriate plans, scripts and self-regulatory strategies" (Dörnyei, 2009a, p. 37). For that reason, Dörnyei and colleagues (e.g. Dörnyei & Kubanyiova, 2014, p. 13-14; Dörnyei & Ushioda, 2011) outlined a list of all the prerequisites and conditions for vision to be empowering, including: having a future self-image which is "sufficiently different" from the current self; the self-image needs to be "elaborate and vivid", "plausible", not perceived as too "certain" or easy to reach, "in harmony" with the learner's self-concept; the vision needs accompanying "procedural strategies"; the vision is "regularly activated"; and the learner must also have a sense of "negative consequences" of not reaching the future self-image.

Hence, despite the assumption of the unique motivational power of possible selves and mental imagery and a rich body of empirical studies to support their usefulness, in place of explaining the whole details of long-term motivation for learning an L2, vision can provide a wider, more general framework of L2 motivation. This is especially true in light of the most recent theorising of motivation as a complex, dynamic and unpredictable process (De Bot & Larsen-Freeman, 2011). In that respect, Dörnyei and Kubanyiova (2014) rightly explain that:

> While the day-to-day realities of one's L2 learning experience are the function of multiple factors related to diverse aspects of the learning environment or the learner's personal life, the concept of vision offer a

useful, broad lens to focus on the bigger picture, the overall persistence that is necessary to lead one to ultimate language attainment (p. 4).

As such, vision can be a source of explaining an overall account of the L2 motivation for many learners. Yet, in order to understand a great deal of L2 learning, we need a more comprehensive construct that can explain the long-term motivational processes required for it. As discussed earlier, the integrative attitudes model may provide us with some of the motivational orientations; the educational-shift era studies of the 1990s can be helpful in understanding the cognitive and situated processes of motivation; and the process-oriented approach is essential in how motivation is regulated over a long period of time. The L2MSS with its envisioning element is also of great value in this regard, yet still not sufficient to account for all the motivational processes. Hence, we are faced with the challenge of putting together a more comprehensive construct. For that, we have two choices which are in many ways complementary to one another: First, the notion of vision accompanied by self-regulation, which has been shown to be effective for many learners (Dörnyei & Kubanyiova, 2014); second, since many students find the burden of self-regulation too heavy to resist which leads to interruption and undermining of motivation in the long run, we need a new motivational tool with properties of intensity and at the same time endurance for a lengthy period. For that to happen, however, a motivational construct needs to go beyond the pressure and fragileness of regulation and possess a self-propelling, self-supporting, and thus almost effortless peculiarity.

2.7 Directed Motivational Currents

The term "Directed Motivational Current" (DMC) refers to a motivational experience in which one is engaged in intense activities triggered by and in pursuit of a personally meaningful and valuable goal for which a salient, facilitative pathway is utilised. A DMC can also be described as "an intense motivational drive which is capable of stimulating and supporting long-term behaviours such as learning a foreign/second language" (Dörnyei et al., 2014, p. 9) and "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). The notion of DMC first originated from the personal experiences of the three authors behind the theory, Zoltán Dörnyei, Christine Muir and Zana Ibrahim, who had also identified similar observations in other people around them. They then coined the term that, to them, best described the novel phenomenon; 'directed' signifies the first component of DMCs, namely that engagement is always directed toward a specific goal; 'motivational' depicts the intense motivational feature of the experience; and 'current' is a metaphor suggesting the similarities that exist between the sustained phenomenon and a strong current, such as the Gulf Stream (Dörnyei et al., 2014).

In two book chapters in which the phenomenon was first introduced (Dörnyei et al., 2014; Dörnyei et al., 2015) and in an attempt to describe in general terms what the DMC was, we provided the example of an overweight person who after a lengthy period of inaction, will go on a diet in which his eating patterns change as he develops exercise routines until he loses a great amount of weight in a relatively short time, and thus achieves a remarkable result beyond his own expectation. An L2 example set forth by Dörnyei et al. (2015, p. 95) is:

> [W]hen someone decides to start learning a foreign language in preparation for an extended foreign trip, and becomes embroiled in the process to such an extent that she spends virtually all her free time studying the language… In an extreme case she might bore family and friends rigid by talking of the trip and the language incessantly, may dream of the journey at night and cannot help but rehearse the language even while lying in bed. It is as if a new world had opened up for her and, up until the journey, her pursuit of this newly found vision becomes one of the most significant parts of her life.

These examples were instances of a pattern that Dörnyei et al. (2014) noticed in experiences which all shared a recurring universal prototype; "a clearly visualised goal combined with a concrete pathway of motivated action brings a new lease of life and burst of passion to an otherwise dormant situation" (p. 10).

DMCs also occur within a group of individuals who display above average motivational levels in their involvement in various contexts such as a shared project, a competition, a charity campaign, or a joint performance. In educational settings, an example of group DMCs is students of a struggling school who will be inspired by a new L2 teacher who provides them with an opportunity for autonomy and as a result, "students are suddenly, if only for this period of time, able to work together at a heightened level of intensity, even surpassing the targets originally set for them" as they are "carried away with the achievement they are now imagining possible for themselves" (Dörnyei et al., 2014, p. 10). A group DMC can be particularly manifested in a classroom project that will "galvanise learners into sustained, goal-focused action" (Henry, Davydenko, & Dörnyei, 2015, p. 330). A DMC might also occur within a single

lesson when students are almost obsessed in a task to the point of wishing to stay involved beyond the class time (Dörnyei et al., 2014).

2.7.1 The DMC components

Despite the position of its theorists that "it is difficult to describe the phenomenon precisely" (Dörnyei et al., 2016, p. ix), the DMC has, right from the beginning, been presented as an almost solid, clearly-defined and patent construct with distinctive features and the assumption that almost everyone has experienced a DMC and can recognise it (Henry et al., 2015). The theorists behind the concept also believe that despite variations in the form, duration, and even intensity of the drive, all DMCs have three major core components in common without which it may not be dubbed a DMC.

2.7.1.1 Goal-orientedness

The first and a fundamental characteristic of any DMC experience is its goal-orientedness, as is the case with a current. Hence, without having a clear final end state, any motivational experience does not fit into the DMC criteria. A DMC is always "directional", leading the person experiencing it toward a "specific" and "clearly-defined" end goal (Dörnyei et al., 2014, p. 13). The importance of this "most salient feature of a DMC" lies in its regulating power to "provide cohesion for one's efforts and help focus energy on final goal achievement" (Dörnyei et al., 2015, p. 99). A DMC goal is believed to have "a gravitational effect on motivational energy, systematically channelling behaviour toward activities perceived as enhancing the likelihood of goal attainment and away from other, unrelated activities that compete for the learner's time" (Henry et al., 2015, p. 331). Therefore, either having or setting a goal is a "prerequisite" for any DMC because in such a powerful motivational drive, one's energy needs to be

rightly invested; however, this does not happen when action is “random” or “spread across different trajectories” (Dörnyei et al., 2014, p. 13).

Simply having a goal however is not sufficient to generate an intense motivational drive, nor is any goal capable of giving rise to DMCs. First, based on the research findings of the goal-setting theory (Locke. 1996), in order for a goal to be motivating and lead to the highest level of performance and commitment, it has to be both specific and difficult, and the person must perceive the goal to be important and also obtainable. However, for a DMC to occur, these conditions of a goal are not enough, Dörnyei et al. (2016) argue. DMC goals need to feature three other requirements: they have to be accompanied by vision; they need to be self-concordant; and they need to be split into smaller, proximal units.

2.7.1.1.1 Vision

Vision is central to any DMC experience, and given the unique motivational power of DMCs, it is unlikely for a DMC to maintain its strength without the vision element (Muir & Dörnyei, 2013). No matter how valuable a goal is, it remains an abstract and cognitive construct, whereas a vision provides a “strong sensory element” and therefore it is “a goal that the learner has made his/her own by adding to it the imagined reality of the actual goal experience” (Dörnyei et al., 2014, p. 13). Therefore, vision is “a key factor” to DMCs because the “peculiar intensity of a DMC cannot be achieved without the addition of this visionary quality” (Henry et al., 2015, p. 331). As such, we might assume that the intensity and frequency of this envisioning element has a direct link to whether or not a motivational experience is considered a DMC.

2.7.1.1.2 Self-concordant goal

As stated earlier, an ordinary goal is unlikely to be enough to give rise to a powerful motivational drive; rather, a viable goal has to be accompanied by a sensory element or vision. However, for the vision to be powerful enough to trigger a DMC, one needs to internalise that vision which means the engagement has to be "a fully autonomous decision" (Dörnyei et al., 2014, p. 15).

Autonomy is related to one's endorsement of a goal as personal, and motivation is positively associated with actions that lead to a personal goal (Pervin, 1989). However, "not all personal goals are truly 'personal' in the sense of being integrated with a core volitional sense" (Sheldon & Elliot, 1998, p. 546). Sheldon and Elliot (1998) suggest that the reason we abandon our apparently personalised goals is that we assume that these self-generated goals reflect our autonomy whereas even "internally generated intentions can feel just as authoritarian as external rules and constraints" (p. 546) when "the person feels coerced by his or her own internal processes" (p. 547). Therefore, for goal setting to energise initial as well as continued motivation, the goal needs to be 'self-concordant', which refers to goals that are in harmony with one's enduring and authentic personal values and natural interests and as such one feels true ownership of the goal (Sheldon & Elliot, 1998, 1999).

Dörnyei et al. (2016) explain that in addition to this central commonality between DMCs and the theory of self-concordant goals as described above, DMCs also share another notion with Sheldon and Elliot's model which is in regard to the pleasurableness of goal striving. Sheldon and Elliot (1999, p. 484) state that "in our model the key distinction is not whether the goal is pleasurable but rather the person feels ownership as he or she pursues the goal". This is also the case in (and a major distinction of) a DMC where enjoyment comes from the sense that one is "acting and

behaving in ways that are identity-congruent" and therefore "even activities which are demanding, stressful, irksome, repetitive, or even just outright boring can nevertheless be willingly entered into and can generate intense feelings of welling" (Dörnyei et al., 2016, p. 49). Furthermore, Henry et al. (2015) postulate that a DMC goal is one that represents an integral part of one's "core identity" and becomes "chronically accessible in working cognition" (p. 331).

2.7.1.1.3 Proximal subgoals

A third dimension of a DMC goal is its breakdown into smaller units called proximal goals (Latham & Seijts, 1999). Research on the impact of having proximal subgoals is not thoroughly consistent, but it is postulated that setting subgoals versus having one distal goal may lead to self-efficacy and task persistence (Stock & Cervone, 1990), and enhanced control over behaviour (Bandura & Simon, 1977). Therefore, in addition to future distal goals, a system of subgoals are also necessary "to guide action toward the attainment of those valued future goals" (Miller & Brickman, 2004, p. 15).

The ability of setting subgoals is a "defining feature" of any DMC experience, and whereas not everyone will manage to set and implement a system of proximal subgoals, those in a DMC can successfully utilise this instrument (Dörnyei et al., 2016). And as they do this, "a vision/self-concordant goal functions as a steering mechanism in the setting of subgoals" and "the attainment of these proximal targets serves to bolster and reinforce the overall vision/goal" (p. 52).

2.7.1.2 Salient facilitative structure

A second major dimension or component of a DMC is its unique structure; that is, a clear pathway from its emergence to its end. A DMC usually has a clear starting point

which is obvious to the individual experiencing the DMC. This beginning is however a process which Dörnyei et al. (2014) have named the launch, in its analogous similarities with a spacecraft:

> At the genesis of each occurrence of a DMC there must be a clear starting point which can unmistakably be identified as the beginning of the process; that is, a DMC never simply drifts into being but rather is triggered by something specific. Consider how important the launch of a spacecraft is: the moment of take-off is a crucial phase of the overall journey as it determines the trajectory, movement, sustainability and of course the final destination. For a successful DMC journey, an elaborate launch system is equally necessary, where all prerequisite conditions are precisely calibrated, since the launch will determine the longevity and strength of the resulting current (p. 14).

Thus, for a DMC to occur, a number of prerequisite conditions need to be present. These conditions are "a combination of contextual, personal and time factors" but they need to "come together in a unique and highly productive manner" (Dörnyei et al., 2015, p. 98). In addition to these prerequisites, there needs to be a powerful triggering stimulus. Examples of these triggering stimuli are "an opportunity for action (e.g. an event or a race), a piece of new information (e.g. an offer from the local gym), or a specific call (e.g. a campaign call or the setting of a school assignment)" (p. 99).

A DMC's launch is also similar to an oceanic current's geographical starting point which "transports the various marine life-forms caught up in its flow along its predefined pathways" (Dörnyei et al., 2016, p. 58). That is, the launch can determine

not only the intensity of the DMC experience, but also and more importantly, the subsequent pathway for the entire DMC behaviour. For that reason, "the successful launch of a DMC arguably constitutes half the battle in the experience of such motivational currents" (p. 58).

Whereas the exact nature of the launch can take various forms such as upward spiral in which motivation and energy increases as one goes forward, or plateauing spiral which starts with a burst of energy but slows down gradually (Dörnyei et al., 2014), once the DMC has launched, there needs to be a "distinctive structure" to facilitate the progress of motivated action; that means "an adequately tailored pathway, allowing the individual to envisage a clear route to success" (Dörnyei et al., 2015, p. 100). In addition to the launch process described above, this tailored pathway includes three other elements that altogether serve not "merely a framework for progress" but they also become "instrumental in generating and maintaining a great deal of the energy involved in fuelling action" (Dörnyei et al., 2015, p. 100). In other words, not only does the structure "provide an accommodating framework which tightly channels the process toward the finish line, but it also plays an active role in keeping the current flowing" (Dörnyei et al., 2016, p. 80). These three procedural elements are behavioural routines, subgoals and progress checks and affirmative feedback.

2.7.1.2.1 Behavioural routines

A powerful and elaborate DMC launch is central not only to setting up the initial motivational surge, but more importantly to the continuation in the subsequent stages of the process, a mechanism which Dörnyei et al. (2014) dubbed "motivational autopilot", through 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" (p. 14).

When the current gets started and going, an individual does not feel the pressure of practicing self-discipline or utilising constant self-regulatory strategies to maintain motivation and involvement (Dörnyei et al., 2016). Nevertheless, for that to happen, merely an effective launch is not sufficient, but a self-renewing stream of motivational process is required which is the function of a "unique makeup" or "an optimal aggregate of several motivational properties" (Dörnyei et al., 2016, p. 80). One way of obtaining that autopilot state is through the establishment of a number of behavioural routines which will become an integral part of the DMC experience.

Dörnyei et al. (2014) conceptualised the function of the behavioural routines to be directly linked to the "initial set-up", a process comparable to domino pieces which "will all fall one after another from a single push because they are all part of the same chain" (p. 14). In that sense, these routines are performed by the individual in the DMC "without exercising volitional control" and once practiced for a period into the DMC experience, they become established undertakings and not doing them "would seem odd, and potentially even lead to feelings of dissatisfaction or guilt" (Dörnyei et al., 2015, p. 100). Once these DMC routines are established, they become "semi-automatic" similar to brushing one's teeth every night (Dörnyei et al, 2014, p. 14).

Yet, a vital issue concerns the validity of this seemingly automated and thus effortless form of engagement and whether this happens on a continuous basis throughout the DMC. Dörnyei et al. (2016) rely in part on research on nonconscious motivation which provides support for the proposition that "human behavior is influenced by processes that are not fully under conscious volitional control" which may then lead people to "automatically prepare for goal-directed action and to block out

potential interference from other temptations" (Dörnyei et al., 2016, p. 85). They also believe that as a result of the presence of unconscious self-regulation, people experiencing DMCs develop a sense of visionary single-mindedness which means "in a DMC there are such high levels of commitment to a certain goal/vision that it becomes pervasive and the resulting behaviors habitualized, thus effectively ruling out other opportunities for action" (Dörnyei et al., 2016, p. 86).

2.7.1.2.2 Subgoals and progress checks

Another structural component by which DMCs facilitate continuous engagement is the presence and utilisation of subgoals (Schutz & Lanehart, 1994). Dörnyei et al. (2014) speculate that despite the presence of a valuable final goal and vision, a successful DMC makes use of proximal goals or targets because "goals are not only outcomes to shoot for but also standards by which to evaluate one's performance and provide a definition of success" (Dörnyei et al., 2014, p. 18). Subgoals operate in favour of directing behaviour through channelling motivational energy, and once each subgoal is obtained, one feels more motivated because one sees his/her progress which then leads to continuous engagement; for example, students find the urgency to pass an exam to be of more priority than the ultimate goal of learning and mastering an L2 (Dörnyei et al., 2016).

In addition to being tools to break the DMC pathway into smaller steps, subgoals also work as a mechanism for checking one's progress. Similar to one's diet when each lost pound confirms the effectiveness of that particular regimen, "a DMC also requires that the person caught up in it should feel that he/she is on track toward achieving their goal" (Dörnyei et al., 2016, p. 88). In this sense, subgoals help individuals experiencing a DMC to not only rely on a set of short-term targets to

maintain their motivation, but also monitor whether they are on the right track and the effectiveness of their utilised structure as a whole.

2.7.1.2.3 Affirmative feedback

Dörnyei et al. (2014) believe that positive feedback is needed because 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); therefore, feedback that does not affirm progress will not be useful.

Affirmative feedback in DMCs can come from external sources (e.g. teacher) or it can be solicited by the individual experiencing the DMC (Henry et al., 2015). Yet, since a DMC is an entirely personal engagement brought about as a result of "a fully autonomous decision" and characterised by a sense of complete ownership (Dörnyei et al., 2014, p. 15), it is reasonable to assume that external feedback may become effective only if it is accepted by the individual experiencing the DMC as relevant; therefore, negative feedback is likely to be ignored.

Thus, even when feedback is provided by a teacher or peer, the main goal of feedback in DMCs is to measure progress, that is, to let one feel and taste the result of one's effort whereby goal attainment will "feel real and achievable" (Dörnyei et al., 2016, p. 93). Positive feedback "fuels subsequent efforts" in a DMC and therefore 'it is reasonable to assume that adding regular feedback points to the structure will intensify the current" (Dörnyei et al., 2014, p. 15).

2.7.1.3 Positive emotionality

Being in a DMC is also unique in terms of the feelings associated with being highly motivated and productive. Individuals experience an elevated emotional state which is

necessary to support the sustainability of the current and also to combat feelings of frustration, apathy and boredom.

Positive emotional loading is an important component of any DMC experience because without supportive affect, long-term engagement might not resist the negative emotions associated with self-control. The source of this positive emotionality however is the realisation that one is making meaningful progress towards a highly personalised goal, and as further sub-goals along the way are obtained, more enjoyment and satisfaction is experienced. This supportive affect is evident throughout the whole DMC period but is more apparent when progress is being made and short-term targets are completed which leads to further excitement (Dörnyei et al., 2015; Henry et al., 2015).

It is important to emphasise that this state of happiness is not due to the intrinsic nature of the activity itself as is the case with practising a hobby or experiencing flow (Csikszentmihalyi, 1988). Rather, it originates from the sense of making progress toward a valuable vision in the future; that is, "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" (Dörnyei et al., 2015, p. 101).

Dörnyei et al. (2016) believe that the underlying reason for enjoyment in DMCs is related to the eudaimonic happiness (Waterman, 1993) which, unlike hedonic pleasure, is experienced when one is engaged in activities leading to "the development of one's skills and talents, the advancement of one's purposes in living, or both" (Waterman, 1993, p. 679). As a result, one will no longer need to experience boredom or a sense of frustration to engage in DMC activities; "because they are perceived as being conducive to the accomplishment of the higher purpose, they are thus seen as congruent with one's deep-seated values" (Dörnyei et al., 2015, p. 101).

2.7.2 Empirical validation

Although the DMC phenomenon is probably not frequently experienced, Dörnyei and colleagues suggest that the majority of people have either experienced first-hand or noticed DMCs in close people around them, and there are countless cases of DMCs on the Internet (Dörnyei et al., 2016). However, there has so far been one published, pioneering empirical study on DMCs conducted by Henry, Davydenko and Dörnyei (2015) who looked for DMCs among migrant L2 learners to Sweden.

Henry et al. (2015) recruited three participants out of 21 targeted learners and interviewed them about their Swedish learning experience. As the aim of their study was to validate DMC experiences, they utilised the main components of the DMC construct to inform their qualitative investigation. The results of that study revealed that the three L2 learners had experienced periods of motivational surges conceptualised as the DMC phenomenon, and that the women's "motivated behaviour is characterised by features similar to those outlined by Dörnyei and colleagues, namely the presence of a salient facilitative structure, the generation of positive emotionality, and the direction of motivated behaviour towards long-term identity-investment goals" (Henry et al., 2015, p. 329).

Despite finding support for the major constituents of the DMC, Henry et al.'s (2015) study did not identify "explicitly defined" long-term goals or visions. However, the authors attributed this to "the special situations" of the participants: As newly-arrived migrants to Sweden, the participants' motivational experiences were aimed at integrating into the host community and system, which in itself represented "a highly self-concordant goal and an idealised identity as powerful as any" (Henry et al., 2015, p. 342).

The findings of these three and many other DMC cases have also been presented in a new book on DMCs by Dörnyei et al. (2016).

2.7.3 DMC's distinctive features

Though there might be a certain degree of uncertainty around the exact operation of the phenomenon especially because of yet very little empirical investigation, in their depiction of DMCs, Dörnyei and colleagues distinguish DMCs from other motivational phenomena which might share major similarities. DMCs have been postulated to be curious, special and unique experiences (Dörnyei et al. 2015, p. 95) characterised by "a particularly intensive state of focused productivity which allows us to achieve a great deal, often much more than we would have believed possible at the outset" (Dörnyei et al., 2016, p. ix). Thus, the first distinguishing property of a DMC is "functioning at a heightened state of productivity" and motivational intensity that is "over and above" normal levels (Dörnyei et al., 2015, p. 97). In this sense, DMCs are not equal to the high motivation of a good learner:

> A DMC is qualitatively different from the ongoing motivation of a good student, due to the fact that it is a relatively short-term, highly intense burst of motivational energy along a specific pathway towards a clearly defined goal: it is over and on top of the steady motivation any student will exhibit throughout the year (Dörnyei et al. 2014, p. 12).

As can be concluded from the above, a DMC is a unique experience in at least two important aspects: First, it is more intense than regular motivational levels. This means that a DMC's intensity is measured intrapersonally, that is, against the

motivational general trajectory of the person experiencing the DMC. As such, a person can be said to be in a DMC even if his/her motivational intensity is similar or even less than other classmates for example, as long as it is above and beyond their own motivational norm. Second, as a result of the first point, a DMC is always a finite undertaking with clear starting and ending points, which can take several weeks, months or even years. Based on that, a DMC is usually easy to identify by the person experiencing it and even others as explained by Dörnyei et al. (2014):

> [A] DMC is a unique drive which is so identifiable that those around the person in the flow are able to recognise a significant change in him/her to the point where, for a short period of time, it becomes a prominent feature of the individual's identity (p. 12).

It is therefore not possible for anyone to be in a constant DMC. Since a DMC consumes an extraordinary amount of motivational energy, it can only continue for a relatively short period of time. Therefore, a DMC's end is directly linked to the achievement of the DMC goal/vision after which motivation returns to its pre-DMC state. The possibility of very long DMCs is also unlikely because one might run out of motivational or even physical resources as DMCs will impact individuals insomuch that they will "disrupt the daily routine of their lives and temporarily alter their identity and priorities" (Dörnyei et al., 2014, p. 12).

2.7.3.1 The current in DMCs

An additional and perhaps more important distinctive feature of a DMC is its self-propelling property (Henry et al., 2015), which does not seem to be found in other

prominent forms of engagement such as flow or intrinsic motivation. Similar to natural oceanic currents, a DMC might not occur easily or frequently, but once it is "initiated, it can transport an individual forward towards a goal at a startling velocity, not unlike the Gulf Stream or the East Australian Current (the latter vividly portrayed in the animated film Finding Nemo as an oceanic 'superhighway')" (Dörnyei et al., 2015, p. 97). From the term itself, 'directed motivational current', a DMC is an intense motivational undertaking which takes an individual from one point to another for a period of time during which continued engagement is achieved without the necessity of using self-regulatory volition control. Therefore, once it has started, sustained engagement until the final goal attainment is almost always predictable (Dörnyei et al., 2015); the power of the motivational current is thought to be stronger than the competing temptations and distractions along the way.

This self-propelling structure is what makes a DMC unique compared to other forms of long-term motivational engagement (Dörnyei et al., 2015, 2016; Henry et al., 2015). Hence, DMCs are not only an additional type of long-term motivation, but perhaps a more superior form of it, especially in comparison to self-control (Kanfer & Karoly, 1972), or self-regulation—which is traditionally and widely believed amongst motivation researchers to be the main method of sustaining long-term motivation (Bandura, 1991a; Kuyper, Van der Werf, & Lubbers, 2000; Ushioda, 2008). The main question then is how does the DMC provide sustainability without the hassles and burden of self-regulatory or self-control processes (Baumeister & Heatherton, 1996)?

To answer this question, we need to go back to the original conceptualisation of the DMC concept. In the directed motivational current, both directed and motivational adjectives are mainly descriptive of the current. The uniqueness of the DMC then lies in its integration of "a significant personal goal" with "an appropriate pathway of action"

and that combination results in "a match that actually works to amplify the energy released by the goal" leading to the individuals experiencing a DMC being carried forward "seemingly effortlessly toward their target" (Dörnyei et al. 2016, p. 20). Dörnyei et al. (2015) explain that being in this effortless current is the function of "the combination of a clear vision and a matching action structure, the latter involving a powerful launch and subsequent steady onward progression" (p. 98; see also Muir & Dörnyei, 2013). Thus, this integration of both vision and structure is responsible for making a DMC self-propelling.

Starting with the role of vision and as discussed earlier, vision is central because it combines a cognitive goal with "an element of fantasy", that is, "imagining different versions and contexts of L2 interaction" (Dörnyei et al. 2016, p. 46). Vision can provide a sense of direction to a DMC experience, but it also plays an important role in maintaining ongoing motivation throughout the DMC journey:

> Images of future selves affect the things people do and are drawn to, as well as those they ignore or avoid; they also affect energy, focus, and commitment to ongoing tasks, thus providing the power and energy to generate and continually propel a DMC (Dörnyei et al. 2016, p. 46).

The mechanism by which vision plays this role in sustaining intense motivation is further explained by Dörnyei et al. (2016) in terms of two main conditions: the future mental image needs to be chronically accessible in the self-concept, and it needs to be frequently activated. When the latter occurs, that is, when one frequently activates their future images, the future goal becomes a "perceived reality" which refers to "the imagined experience of having reached the desired

future goal-state" (Dörnyei et al. 2016, p. 47). As a result, these future states not only become frequently accessible, but they "form, in effect, a part of who the individual actually is in the present" (Dörnyei et al. 2016, p. 47).

In addition to vision, a salient structure is required both to provide goal-directed behaviour with an accompanying framework and also to keep the current flowing (Henry et al., 2015; Muir & Dörnyei, 2013). This structure is unique and a perfect match to one's peculiar DMC. A DMC structure is the result of a process called the launch which is specific to an individual's personal circumstances. However, the importance of the launch is not only in generating the experience, but also in determining its "trajectory, movement, sustainability and of course the final destination" (Dörnyei et al., 2014, p. 14). Hence, the launch helps the DMC to achieve its "motivational autopilot" property, which means that "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).

However, as the vision needs frequent activation throughout the DMC experience, a salient structure also needs continuous re-triggering in order to re-channel energy toward the DMC vision when interruptions occur (Dörnyei et al., 2016). Based on this need for re-triggering, a DMC can maintain its current through the combination of a "unique makeup" or "optimal aggregate of several motivational properties" (Dörnyei et al., 2016, p. 80). These optimal factors are proximal subgoals, affirmative feedback, and more importantly behavioural routines.

Although it might take a while for an individual to develop recurring routines in a DMC, once established they have the power to eliminate the necessity for exercising volitional control; that is, motivated behaviour is executed without motivational processing as "they form part of the structure" (Dörnyei et al., 2016, p.

83). As such, expending conscious effort is no longer required for continued engagement in DMC tasks; an individual can almost unconsciously execute automatized behavioural routines.

2.7.3.2 Nonconscious self-regulation

To Dörnyei and colleagues (e.g. Dörnyei et al., 2016), the latest findings of nonconscious self-regulation research is consistent with the DMC's power to make behaviour execution an automated undertaking in the form of habits. This is, they argue, mainly the impact of chronically-accessible visions which remain active in the self-concept and thus "cause automatic perceptual biases in how a person interprets his/her environment" (Dörnyei et al., 2016, p. 85). In that respect, DMC habits are not only performed automatically, but they are also protected by a visionary single-mindedness layer which safeguards the DMC from competing goals and distractions. As a result, engagement in DMC tasks becomes analogous to brushing one's teeth before going to bed (Dörnyei et al., 2014).

As noticed, in conceptualising unconscious motivation within the DMC (which is central to understanding the most distinctive feature of the phenomenon), DMCs are always linked to the presence of a strong visionary element. However, since envisioning may not fully explain the intensity of a DMC, Dörnyei and colleagues (e.g. Muir & Dörnyei, 2013) offer the notion that a matching structure is also needed to support the vision. However, the conceptualisation that a DMC is essentially a combination of vision and a structure (Dörnyei & Muir, 2013) does not seem to be explaining fully why a DMC is indeed a unique phenomenon in terms of its effortless and self-propelling features. We have seen in a previous section that vision works through generating self-regulatory strategies; yet, this does not necessarily produce any self-propelling

properties to motivated behaviour, even when these self-regulatory strategies are developed into habits (Rothman, Baldwin, Hertel, & Fuglestad, 2011). Therefore, there is yet another element that may offer additional explanatory insight as to how currents maintain their energy in DMCs. This element is the effect of positive affect—the third main constituent of a DMC (Dörnyei et al., 2014, 2016; Henry et al., 2015).

It is an almost established certainty that for any goal to be motivating, the outcome of achieving the goal needs to be valuable (Wigfield & Eccles, 2000). However, people do not necessarily engage in goal-oriented behaviour simply because its outcome is worthwhile, and when they do, they need conscious self-regulation, including using mental imagery. Therefore, in addition to its perceived value, a cognitive goal needs to be emotionally rewarding to activate nonconscious motivation (Papies & Aarts, 2010). Research has shown that in order for goal-directed behaviour to be performed unconsciously, there needs to be a systematic presence of stimuli indicating that engagement is worth-pursuing, desirable and emotionally rewarding.

Thus, upon repeated occurrence of positive affect as a result of a stimulus, that stimulus is then processed "quickly and without the need for conscious awareness" (Papies & Aarts, 2010, p. 128). Hence, in addition to vision, positive affect (which can also be the outcome of envisioning; MacIntyre & Gregersen, 2012) plays a significant role in generating supportive emotions which will function to motivate engagement (Ibrahim, 2016). The uniqueness, rarity, and infrequency of DMC experiences in one's life can perhaps also be interpreted in light of the presence of positive affect: When people can no longer associate a task with positive emotions (such as excitement and joy), they lose the unconscious motivational tendency to engage in that task—and therefore they once again need conscious, mostly cognitive, self-regulatory strategies to motivate themselves. As such, we can distinguish between two types of habitual

behaviour: one is executed with excitement and joy (as in DMCs), and the other is perceived as repetitive, tedious, and perhaps boring (as in self-control). This conceptualisation of positive affect and motivational autopilot needs empirical support and is a fundamental research query of this thesis.

2.7.4 Final piece of the puzzle?

The theorists behind the DMC notion emphasised that the main impetus for proposing a new construct to L2 motivation was a general lack of a solid theoretical model—not just in L2 but also in mainstream motivation—to explain the process of long-term motivation (Dörnyei et al., 2014, 2016; Henry et al., 2015). Whereas the main emphasis had been on cognitive aspects of setting goals or the value of reaching a goal, the addition of the vision element was a crucial step forward in explaining what takes place between goal setting and goal attainment. Therefore, the aim of research on the role of vision was incited "by the search for higher-order factors which could explain the sustained motivation that is required for remaining committed to long-term learning processes, such as the mastering of an L2" (Dörnyei et al., 2016, p. 22).

Vision however needs a supportive procedural structure for its effective motivational functioning which together—and in a uniquely perfect match—can generate long-term motivational phenomena such as DMCs. However and as we have seen earlier, even a perfect match between vision and structure might as well be a form of self-regulation; however, once engagement is supported by unconscious motivational tendencies, learning becomes effortless, sustainable and predictable (Papies & Aarts, 2010).

Dörnyei et al. (2016) suggest that the concept of DMCs is the final piece in the puzzle of putting together a construct that includes all the parameters of the long-term

motivational processes. However, since DMCs are not believed to be frequent occurrences, they postulate that understanding DMCs is a fundamental, and perhaps initial, step in understanding most of the long-term motivational phenomena, including those that share many components with DMCs but are not quite the same. Therefore, they distinguish between DMC proper (Dörnyei et al., 2014) or fully-fledged DMCs with DMC-like phenomena (Dörnyei et al., 2016).

Thus, deeper understanding of all the parameters and processes of long-term motivational processes (including DMCs and DMC-like phenomena) marks the beginning of not only a final missing piece in the puzzle, but rather and perhaps more importantly, a new line of research that aims to investigate a series of areas that motivation research has been lacking. In the light of this, we should probably expect research that considers more than one phenomenon (such as DMCs) and extend to a multitude of complex temporal processes. Yet, in this respect, research might need to be informed by all the prospective as well as previous models of L2 motivation. The integrative attitudes model might provide a valuable basis for implicit and unconscious attitudes and habits; the process-oriented approach is essential for understanding long-term motivation as a temporal process and self-regulation; the situated-cognitive research can be of considerable significance in understanding goal-oriented and future-directed long-term motivation; and vision is a major dimensional tool for explaining long-term motivational tendencies, including positive affect.

After more than six decades of L2 motivation research, the field has come a long way and is set to expand much further insofar as it might indeed not be a completely positive development, as Dörnyei and Ryan (2015) predict: “this diversification and expansion also pose the risk that motivation researchers will no longer speak the same language and that the emerging methodological multilingualism might introduce a

degree of fragmentation" (p. 102). The notion of DMCs might nevertheless be a precious opportunity so that different aspects of the current L2 motivation research come together and settle around a number of aspects shared among them especially with regard to the centrality of long-term properties of L2 motivation.

In that respect, the DMC and long-term motivation research can provide a bringing-together, common ground with all the lines of thought sharing the aim of L2 motivation research: to understand "the driving force to sustain the long [italics added] and often tedious learning process" (Dörnyei, 1998, p. 117). The research agenda of this thesis is therefore one of the rare attempts in the L2 motivation field to investigate not only just the DMC phenomenon per se, but through that, what constitutes long-term motivation and how motivation is sustained in the lengthy path of acquiring a second language and in the face of the too many obstacles and temptations. With this ambitious goal in mind, this thesis first makes the necessary link between DMCs and existing motivation theories, and then presents empirical research on how learners experience and maintain long-term motivation. In doing so, emphasis will be put on the major components of the DMC construct as a basis for other long-term motivational processes and phenomena as experienced by L2 individuals and groups of learners in the classroom.

Chapter 3: DMC Aspects in the Motivation Literature

3.1 Introduction

DMC is a novel concept both in the L2 motivation field and mainstream psychology. Nonetheless, aspects of the construct have been discussed and conceptualised in many motivation theories. Therefore, although the phenomenon itself as an intense, yet long-term form of goal-governed engagement has never captured the radar of motivation researchers (Henry et al., 2015), the DMC can be seen as the unique integration of a number of well-researched and validated motivational properties. Yet, any existing theory alone seems incapable of explaining the DMC experience. Dörnyei et al. (2014) believe that the lack of focus on temporal aspects of motivation is the main reason for such an inability:

> An insufficient focus on the time aspect in this regard is able to explain the fact that it is not possible for a single mainstream motivation theory to subsume this news construct, whereby the channelling of such dispositions into a specific process with a specific structure is able to hugely amplify the motivational energy released (p. 17).

So we can understand the DMC phenomenon from a theoretical perspective, it is necessary to resort to the motivation theories that have focused on aspects of the DMC. To do so, in this chapter, I review some of these theories that, I believe, share and provide significant support for the DMC's fundamental characteristics and mechanisms whereby it dictates its effect. I first present a brief overview and the main components of each theory, followed by its applications in the L2 motivation literature, and then its

implications for the DMC. Also, for each theory, I discuss the potential limitations and why the theory in question is only partially related to the DMCs. In doing so, aspects of theories which provide most relevance to, or share considerable similarities with the DMC have been given priory in length and detail.

3.2 Goal setting theory

3.2.1 History and main features

Goal setting theory was developed as a theory of motivation under the broader umbrella of cognitive psychology, and as a more realistic approach than other theories' ambitious claim to offer a comprehensive account of the entire motivational system (Locke, Shaw, Saari, & Latham, 1981). It is based on the notion that human action is aimed at a purpose (goal); although virtually all living organisms direct their actions towards a goal, human beings have the ability to reason which empowers them to conceptualise goals and volitionally act to attain them through selected means (Latham & Locke, 1991). The theory is attributed to the American psychologist Edwin Locke who started researching and writing on the theory in the mid 1960s and published a seminal work in 1968, and along with another prominent name associated with the theory, Gary Latham, drew conclusions from hundreds of both field and laboratory studies of their own and many other authors. The two later published two well-known books in 1984 and 1990 summarising the core findings and depicting the major areas of the goal setting theory, with the 1990 book being the most complete account of the theory (Locke & Latham, 1984, 1990; Locke, 1996; Lunenburg, 2011). Goal setting is one of the most researched theories that by 1996, there had been over 500 studies on it (Locke, 1996). The scope of interest in goal setting theory research has been in both academic and organizational domains (Locke et al., 1981; Mento, Steel, & Karren, 1987; T. A. Ryan, 1970).

The theory attempts to explain the effect of motivation based on the question of why some people outperform others of the same ability and knowledge. From the goal setting theory's perspective, differences in goals will result in differences in performance because goals motivate action (Latham & Locke, 1991). About ninety percent of field and laboratory studies confirmed the causal relationship between goal setting and performance. Differences in ability and knowledge, however, have to be borne in mind because making mistakes due to the lack of knowledge and inabilities will make the linear relationship of goal setting variable and performance unrealistic (Locke et al., 1981).

According to the theory, there are two major goal attributes: content and intensity, and two main attributes of content studied are specificity and difficulty (Locke, 1996; Locke et al., 1981). As for goal difficulty, despite studies predicting otherwise, numerous studies have found that more difficult goals resulted in greater achievement, with 84% of studies supporting the hypothesis (Locke et al., 1981; Locke & Latham, 1990; Mento et al., 1987). Individuals with even extremely high goals that were never or rarely attained performed better than subjects who had easy goals (Hammer & Harnett, 1974; Locke et al., 1981).

The second constituent of content is goal specificity or clarity. Goal setting theory assumes that more specific and explicit goals lead to better performance, and specificity is obtained through quantification and enumeration (Locke, 1996). A goal that is both hard and specific is linked to a higher performance than easy or unclear goals such as 'do your best', or no goals, with 96% of studies supporting the hypothesis (Locke et al., 1981; Mento et al., 1987). The two assumptions mentioned (goal difficulty/goal specificity) encompass the core findings of the goal setting theory (Locke & Latham, 1990, 2005).

In spite of all the above, it is noteworthy to mention that goals can affect motivation while they are challenging, but still attainable. When goals are no longer realistic and go beyond the limit of one's ability, setting higher goals is not thought to be beneficial (Locke & Latham, 1990), and might even be harmful because commitment suffers (Erez & Zidon, 1984). In a recent study on video-gaming training, researchers found that initial unrealistic goals have a negative effect on later performance (Brusso & Orvis, 2013). However, Miles and Clenney (2012) conducted two studies and concluded that in negotiation contexts, goals that are more difficult than just challenging, yet attainable, lead to an increase in performance.

The positive linear relationship between goal difficulty and performance is reversed to negative when goals are rejected by the individual. In a study on 140 technicians and engineers, Erez and Zidon (1984) found that goal acceptance is necessary for goal difficulty to be effective. As for participation in the goal setting process, in contrast to the previous proposed beliefs of its influence on goal commitment, it was later found not to have been based on a sound scientific basis (Locke & Latham 2005).

Goals supposedly influence performance through four mechanisms (Locke et al., 1981):

1. Goals direct attention and action toward the right goal through avoiding attention to be directed at irrelevant goals that might waste time.
2. Harder goals motivate people to make more effort, both physical and mental.
3. Goals lead to sustainable persistence over an extended period of time until the desired goal is achieved.
4. Goals indirectly urge people to improve their skills and develop strategies such as planning and training.

Related to persistence, deadlines are assumed to promote performance because they serve to control time and add the motivational effect of goals leading people to make extra effort. However, unrealistic deadlines especially with complex tasks negatively affect the outcome quality (Lunenburg, 2011).

The fourth point mentioned above is associated with another assumption in the theory that, tasks that are simple and straightforward are more beneficial than complex tasks, because people may not have the skills required to perform well in them, although there is the possibility of acquiring the necessary knowledge through skill development (Locke & Latham, 2005).

In a number of studies on the role of goal setting on satisfaction, it has been confirmed that improved performance resulted from goal setting has a considerable effect on reported satisfaction. In support of Ilgen and Hamstra's (1972) assumption that "satisfaction with one's performance is a function of the difference between actual performance and performance goals", Hammer and Harnett (1974, p. 217) conducted a study and provided evidence in support of the relationship between performance and satisfaction in a competitively structured task. Because goals are both "outcomes to attain and standards for judging one's accomplishments", engagement in goal-directed behaviour and goal achievement brings satisfaction (Locke & Latham 2005, p. 129). This finding has been concluded from earlier studies; in a number of studies, Locke, Cartledge and Knerr (1970), for example, showed that "satisfaction with performance is a function of the degree to which one's performance achieves one's desired goal" (p. 152).

The underlying mechanism by which goals lead to satisfaction is the relationship between values and emotions; positive emotions are the consequence of conditions that further one's values. In goal setting theory, one's goals and thus performances are

considered to be one's values; therefore, achieving goals leads to positive emotionality and satisfaction, whereas failure leads to dissatisfaction. Moreover, "goals can also be used to enhance task interest, reduce boredom, and promote goal clarity" (Locke, 1996, p. 122).

An important area of goal setting theory is the distinction between two types of goal setting, proximal and distal goal setting. Historically, despite some inconsistency (Latham & Locke, 1991), there has been strong evidence showing a positive relationship between proximal goals and motivation. Bandura and Schunk (1981), for example, had conducted a study involving 40 middle-class children who had low arithmetic skills. They found that through the assignment of proximal subgoals, the children displayed more interest, achieved mastery, and raised their self-efficacy, while distal goals had no such effects. In their seminal paper, Stock and Cervone (1990) researched the self-regulatory influence of proximal subgoals, and concluded that these goals impact motivation in four ways (Latham & Locke, 1991): Proximal subgoals increase one's self-efficacy to carry out the assigned task because seeing the task in smaller and shorter terms makes it seem more doable; achieving a subgoal increases self-confidence that one is capable of performing the task; subgoals help with people's positive self-evaluation; and subgoals lead to an increased level of persistence.

Moreover, significantly, subgoals can be highly influential because they can serve as feedback that one is making meaningful progress toward the distal goal. Latham and Seijts (1999) conducted a study on young adults who were asked and paid to make toys; while participants who were told to "do your best" made more money than participants with only a distal goal, those who were given proximal goals in addition to a distal goal earned substantially larger amounts than the "do your best" group. The authors explained this effect in terms of the role of proximal goals on self-

efficacy but also because, unlike setting a distal goal only, subgoals "provided clear markers of progress for the participants" (p. 426). This knowledge of progress in turn is necessary so one knows whether what one is doing is leading to the distal goal achievement (Latham & Locke, 2007).

3.2.2 Goal setting theory and L2 motivation

Little emphasis has been put on goal setting theory in the L2 literature and classrooms (Dörnyei, 2003; Oxford & Shearin, 1994). In a study on 75 students taking a French course and aimed at detecting the variables that could mediate the relation between language attitude and motivation, Tremblay and Gardner (1995) found that specific goals and frequent referencing to them increases students' motivation through increasing the level of intensity, persistence, and attention. They also concluded that students are likely to set specific language learning goals if they hold positive language attitudes. On the other hand, Oxford and Shearin (1994) report research that goal setting behaviour is directly influenced by individual differences of learning styles; for example, extroverted L2 learners are more inclined to communicative goals while introverted learners set analytical and cognitive goals. Moreover, these learning styles can be substantially different across cultures; Arabic and Hispanic L2 learners are more respondent to communicative and social goals compared to Japanese and Korean students (Oxford, Holloway, & Horton-Murillo, 1992).

3.2.3 Implications for the DMC

Some elements of goal setting theory can explain part of the motivational surge noticed in DMCs. First, the DMC is completely goal-governed as goals trigger the elevated motivation and shape the entire process throughout. Goal setting theory provides a

meaningful account for the mechanism by which goals affect performance such as focused direction and effort, persistence, and strategy development. Second, positive emotionality found in DMCs has been described in goal setting theory and attributed to one's values. Third, the role of feedback is highlighted in goal setting theory which is also an important element of DMCs. Fourth, satisfaction is not the outcome of engagement itself but the result of successful progress made towards goals. Fifth, and perhaps most importantly, the theory's proximal goal setting has direct implications for the use of subgoals in DMCs; despite the necessity of a distal goal, a DMC makes use of frequent proximal goal setting (Dörnyei et al., 2014).

3.2.4 Potential limitations

There is evidence (Hollenbeck & Klein, 1987) against the theory suggesting that, at times, goal setting does not yield, and when it does, the effect is not always equal in size; the effect of goal setting is entirely conditional on a number of other variables, and the results can be considerably inconsistent. Austin and Bobko (1985) also illustrate the theory's shortcomings especially that it has mainly depended on short-term laboratory vs. field studies. This issue (i.e. the overlooked role of time), according to Fried and Slowik (2004), poses a significant weakness of the theory in the face of complexity and dynamism, and thus "the contribution of goal-setting theory has not been fully realised because of the failure to systematically incorporate the dynamic role of time" (p. 404).

In reference to the theory's theoretical link to the DMC, I believe goal setting theory's support to the DMC is limited for the following reasons:

- Through adopting self-efficacy, goal setting theory assumes that the "person does not have to believe that total success is possible…, as long as they believe that partial success or progress toward the goal…is meaningful" (Locke 1996, p.

119). In DMCs, however, the individual is fully confident that the goal attainment is completely viable (Dörnyei et al., 2014).

- Goal setting theory does not extend to provide a detailed explanation of why people abandon their strife towards a goal even when it is high and valuable to them. What it offers is the concept of goal commitment in relation to goal difficulty; high commitment is thought to be achieved when the goal is specific and difficult, and the person is convinced the goal is important and attainable (Locke, 1996). However, in spite of relatively little research on goal commitment (Hollenbeck & Klein, 1987), it is unclear how goal setting theory accounts for a motivational surge in a person at a certain time/context, and the lack of it at other times even in the presence of all the goal commitment conditions.
- Goal setting theory offers little in regard to a motivational framework or structure. In a DMC, however, a recognizable structure is a significant constituent in the entire process.

3.3 Flow theory

3.3.1 History and main features

The pioneering researcher behind flow theory is Mihaly Csikszentmihalyi who started studying the effect of intrinsic motivation on a group of artists who painted with full concentration and interest. He then described the theory in his first major work, Beyond Boredom and Anxiety (Csikszentmihalyi, 1975). The artists showed a great deal of enthusiasm and interest while absorbed in their painting for which they were not expecting any extrinsic rewards and even the finished product was of little value. Unconvinced by the psychologists' notion of "sublimation" or the best social expression

of true desires, Csikszentmihalyi suggested that the quality of subjective experience was what led the artists to engage in for-itself-intrinsically-rewarding tasks; i.e., "the rewards of painting came from painting itself" (Csikszentmihalyi, 1988, p. 4). He called this phenomenon the flow experience originating from an earlier term, autotelic experience: (auto= self) and (telos=goal), applying to an activity that is rewarding per se, not because of the final product or external reward (Nakamura & Csikszentmihalyi, 2002).

Flow has also been referred to as optimal experience marked by focused concentration, full engagement, intrinsic motivation, control over task at hand, and enjoyment. Such experiences are also greatly linked to a better quality of life to such an extent that even people with disabilities or poor health conditions can use them for improved coping strategies and positive changes in personality and social relationships (Fave, Massimini, & Bassi, 2011).

In order for an experience to be called flow, there have to be seven characteristics which Csikszentmihalyi (1975, p. 38-48; Csikszentmihalyi, 1990) named elements of flow:

1. "merging of action and awareness": when individuals are in flow, their full attention is all directed to the activity and how they could go through the steps of the task. That complete concentration on their actions makes them not pay attention to 'awareness' itself;
2. "a centering of attention on a limited stimulus field": the person in flow must disregard all other distracting stimuli from the outside and direct all his/her attention to the present time;

3. “self-forgetfulness”: the person in flow is so busy with the demands of the task that there will not be any room for “self-ish considerations” or for the “ego” to have any presence;
4. “not worrying about the possibility of lack of control”: while in flow, everything seems to be under the control and this helps the person to be able to cope with emergent challenges in the process, even if they represent real dangers as happens to rock climbers;
5. “coherent, noncontradictory demands for action” and “clear, unambiguous feedback to a person’s actions”: in flow, goals are clear and provide exact points for one to strive for because they are “logically ordered” and mastering each step serves as clear feedback that one is making meaningful progress;
6. “autotelic”: flow activities are performed for the sake of themselves; “there is no possible reason for climbing except the climbing itself”;
7. losing track of time; traditional measurement of time is no longer applicable. Time usually goes faster or sometimes slower than actual, but this disregard for the clock time seems to add to the enjoyment of flow.

A fundamental distinction of the flow experiences with other (e.g. entertaining) experiences lies in enjoyment. Flow is always associated with a feeling of enjoyment which is originated from inside as opposed to the prominent outside norms defining happiness such as material gains or securities provided by others, that is, pleasure. Pleasure is actions that humans perform in order to gratify genetically biological programmes such as material gains, eating and sexuality. However, enjoyment, as uniquely related to the ongoing moment when one is doing the activity at the present time without any temporal links to the past or the future, is a rare experience that occurs as a result of a psychological process called complexification, which is the “process by

which states of consciousness seek increasingly greater opportunities for action" (Massimini, Csikszentmihalyi, & Fave, 1988, p. 63). When we are faced with situations where skills and challenges witness a competing balance, we are provided opportunities for action that make us fully involved without feelings of anxiety or boredom—when the task is too difficult (beyond one's abilities), it leads to anxiety, and when it is too easy, it brings boredom. As one is making progress in performing the task and going up through the next steps (e. g. in rock climbing), one encounters new challenges that force him/her to use all his/her skills and resources to cope with the mounting demand. Nevertheless, since it is extremely difficult for anyone to continuously maintain or measure a balance between skills and challenges, this balance in flow is in effect perceived—not actual. Therefore, it is up to the person's ability to maintain a state of flow through "cognitive techniques", for instance (Csikszentmihalyi, 1975, p. 53). Therefore, no single activity guarantees the occurrence of flow even if it provides a great number of repeated gradual challenges, because if the person's skills do not match the level of challenges, it will not be enjoyable. Strategies such as mediation as found in yoga can equip us with helpful techniques to confront challenges in a smarter way to maintain our ability on the task demands (Csikszentmihalyi, 1988).

However, other subsequent studies showed that keeping a balance between skills and demands alone does not provide opportunity for flow to occur; both the skills and challenges are to be higher than average. This is considered a modification to the original thought in that enjoyment can only be achieved when skills and challenges are above the average level (Massimini et al., 1988).

The theorists of flow believe that whether one is able to create a state of flow largely depends on one's personality traits, that is, as a matter of individual difference. It had been speculated that autotelic personality is in part a result of inborn individual

differences (Csikszentmihalyi, 1988), genetic chemical imbalances referred to as attentional disorders (Csikszentmihalyi, 1990), childhood experiences in school and family environments where "complex family environments" provide opportunities for "high-challenge, high-skill situations" (Nakamura & Csikszentmihalyi, 2002, p. 99).

On the other hand, to maintain quality experience of flow, there have to be clear goals or sub-goals to which all resources are consumed to accomplish. Accomplishments are in turn used as immediate clear feedback for the next stages. However, the final achievement is not the aim of engagement; it is only a means and usually used for the purpose of structuring. In Csikszentmihalyi's (1975) words, "ideally, flow is the result of pure involvement, without any consideration about results. In practice, however, most people need some inducement to participate in flow activities, at least at the beginning, before they learn to be sensitive to intrinsic rewards" (p. 42).

Since its emergence, flow has been applied in many disciplines and contexts, for example: working women (Allison & Duncan, 1988), writing (Larson, 1988), online games (Hsu & Lu, 2004), ocean cruising (Macbeth, 1988), web browsing (Novak & Hoffman, 1997; Skadberg & Kimmel, 2004), family context (Rathunde, 1988), online learning (Shin, 2006), athletes' performance (Stavrou, Zervas, Karteroliotis, & Jackson, 2007); and in different cultural contexts, for example: Korean immigrants (Han, 1988) and Japanese motorcycle gangs (Sato, 1988).

3.3.2 Flow and L2 motivation

Flow theory has rarely been applied in the L2 settings. In a pioneering study, Joy Egbert (2004) conducted a field study involving 13 secondary school Spanish learners performing language tasks on seven separate occasions. The findings suggested the

occurrence of flow and that, more importantly, teachers could "theoretically" facilitate flow in L2 learners through assigning tasks that lead to flow (p. 513).

Despite the lack of ample flow research in the L2 literature, studies of flow in education settings suggest that students' engagement in learning tasks can be increased when they believe that the challenge presented and their skills are high and compatible, teaching is relevant, and they possess control over the learning environment (Shernoff, Csikszentmihalyi, Schneider, & Shernoff, 2003). The study by Shernoff et al. (2003), which included 526 high school students, concluded that the students "were also more engaged in individual and group work versus listening to lectures, watching videos, or taking exams" (p. 158).

3.3.3 Implications for the DMC

Generally speaking, flow is very close to the DMC because they share the basic characteristic through which they are recognized and distinguished from other motivational phenomena: A motivational surge for a period of time which is characterized by directed concentration, full engagement, high interest, and goal orientation—with variations as discussed below. An important aspect of flow that can also be significant in DMCs is the balance between the challenge of the task and the individual's skills. This, in both cases, leads to gradual progression represented in subgoals and smaller steps toward the final goal, a process constantly informed and maintained by immediate feedback. Other similarities are strong positive emotionality, enjoyment (although in different terms), perception of control, and resistance to outside influences or distractions.

The conditions that can set up a flow are almost always identical; mainly the balance of demand and ability, opportunity for action, clear task goals, sense of control,

and positive feedback. This conceptualisation can also inform the DMC that it can occur when certain time and contextual parameters come together and trigger a directed motivational surge.

3.3.4 Potential limitations

In spite of the similarities mentioned, flow theory can only be related to DMCs in a limited number of characteristics, with major differences as follows:

1. Flow theory is concerned with short-term tasks such as painting, reading, music, etc., or a series of short-term repeated identical episodes, while DMCs continue for a long period such as a few weeks, month or even years.
2. A DMC is an entirely goal-oriented motivational surge, while in flow the goal is important only to provide a clear structure. When studying a group of artists, Csikszentmihalyi (1988) noticed that "it was quite typical for an artist to lose all interest in the painting he had spent so much time and effort working on as soon as it was finished" (p. 3). A DMC is mainly triggered by a personalised goal or vision which also plays a main role in its sustainability.
3. Flow is involvement in a task that is rewarding in itself (autotelic), but a DMC is concerned with engagement which leads to reaching a goal that is of more importance than the enjoyment stemming from just practicing the activity.
4. The scope of the flow premise is mostly with individuals who enjoy engagement in particular activities that they find personally interesting, for example one's extreme love for painting or playing chess. These activities are mostly personally selected and triggered by previous experiences. However, a DMC is triggered by an internalised goal for which learning an L2 is necessary.

5. Unlike flow, DMCs are not the function of personality trait factors. A recent conceptualisation of motivation rejects the traditional view of individual differences and sees them rather as changing, dynamic, interrelated, and extremely sensitive to the environmental factors (Dörnyei, 2009b), and even in flow states there is a merging integration of cognitive and motivational factors that need to be present throughout the entire experience (Dörnyei, 2010b).

3.4 Dynamic systems theory

3.4.1 History and main features

Dynamic Systems Theory (DST) first emerged as a theory of change to explain mathematical, biological, and other natural phenomena in the sixties of the previous century (Lowie, 2012). DST is related to three other theories, Complex Theory, Emergintism, and Chaos Theory (Dörnyei, 2009b) that have been developed in different domains. However, they all share at least one fundamental principle which is that linear cause-effect relationships cannot be taken for granted. Diane Larsen-Freeman was the first to introduce the theory to the applied linguistics in 1997 through an article in the Applied Linguistics journal titled, 'Chaos/Complexity Science and Second Language Acquisition'. Through that and other works (e.g. a study on five Chinese students), she presented DST as an alternative to the previous thinking on the pretext that "a structural theory of static competence does not easily lend itself to explanations of developmental change" (Larsen-Freeman, 2006, p. 614). The theory has recently received a great attention from applied linguists including motivation researchers (e.g. Dörnyei, Henry, & MacIntyre, 2015; Dörnyei & Ushioda, 2011).

A system is called dynamic or complex if it consists of at least two components that are interconnected to each other and are changing over time (Dörnyei, 2011).

According to DST, the components or agents of a system are heterogeneous and always reacting within themselves in an always-changing manner making the outcome behaviour almost always unpredictable.

Dynamism, as one of the main features of any dynamic system, becomes an integral part of the system as it occurs constantly and as a result of continuous interactions with the outside surrounding (context) and within the multitude elements within the system itself. Moreover, such systems are usually nested in other complex systems in which change is happening throughout and at all levels and timescales (Larsen-Freeman & Cameron 2008). The change in a dynamic system, however, is non-linear, in the sense that change is not proportional to the size of the input. A small perturbation at a particular point in time might have a huge impact whereas a large input at another point may not produce any considerable change. This phenomenon is called The Butterfly Effect, originally a meteorological term, which emphasizes the sensitivity of a system to the initial state: for example, word recognition skills in the native language might affect word recognition in the L2, or a middle-ear infection in childhood might negatively affect L2 acquisition in adulthood (De Bot, Lowie, & Verspoor, 2007). Non-linearity is considered a dramatic rejection of the cause-effect relationship prominent in earlier theories, and it implies that the outcome behaviour of a system is never predictable in advance.

The constant flux apparent in dynamic systems also causes the outcome behaviour to show a great deal of variability. However, unlike traditional perspectives which consider variability as noise or "unwanted by-product" of data, DST acknowledges variation and views it as "intrinsic property of the developmental process" without necessarily attributing it to any cause. This is called "free variability" which is a natural outcome of growth (Van Dijik, Verspoor, & Lowie 2011, p. 55 & 83).

While variability brought about by continuous change is emergent from the fluctuating interactions among various elements and agents both inside a dynamic system and the system's interaction with other systems and context, dynamic systems tend to reach a rather stable state which is called attractor state. This is due to a fundamental capacity of any open system called self-organization, which means that everything in a dynamic system changes over time until it gets attracted into a preferred stable, but not predictable, state. The emergent stability is not caused by any particular variable, and the new features of the system do not represent the sum of the parts in that the new behaviour of the system could not have been predicted from its encompassing elements (Mason, 2008). In contrast to preferred states (attractor states), the trajectory of a complex dynamic system can also have dispreferred states called repeller states. Although attractor states are considered temporary, depending on their strength, energy is needed to take a system out from one state to another. As such, in L2 development, there has to be a minimum amount of energy to maintain growth (De Bot et al., 2007).

3.4.2 DST and L2 motivation

From a DST perspective, L2 motivation can no longer be considered as a fixed variable, but rather as a complex system within the subsystem of the L2 learner and context, whose trajectory is always shifting due to the ever-changing interactions within its own components and in response and adaptation to the outside influences of many other systems that are also complex and dynamic. The relationship between these complex systems in which motivation is also nested is called "co-adaptation" which refers to "a kind of mutual causality, in which change in one system leads to change in another system connected to it, and this mutual influencing continues over time" (Larsen-

Freeman & Cameron, 2008, p. 233). Dörnyei and Skehan (2003) describe the dynamic nature of motivation as follows:

> During the lengthy process of mastering certain subject matters, motivation does not remain constant, but is associated with a dynamically changing and evolving mental process, characterized by constant (re) appraisal and balancing of the various internal and external influences that the individual is exposed to (p. 617).

Having considered an inevitable shift from his process-oriented model, Dörnyei came to the belief that the cause-effect relationships model to motivation cannot do full justice to the complexity of L2 motivation (Dörnyei, 2009b). Applying the principles of DST to L2 motivation, Dörnyei (2009b) reshaped the traditional view of motivation as depicted within the framework of individual differences (IDs)—which were thought to be stable traits that could be generalised across different contexts and times. Instead, he argued that motivation should now be studied "taking a systemic approach by identifying higher-order motivation conglomerates that also include cognitive and affective factors and which act as wholes" (Dörnyei, 2011, p. 92). According to this model, the dynamic cognitive, emotional and motivational sub-systems (components of the human mind) are interacting with one another and the temporal environment to give rise to stable and thus researchable attractor states. The role of the researcher, then, is "to find the level of analysis that captures the right combination of these three ingredients in a given situation" (Dörnyei, 2011, p. 98).

3.4.3 Implications for the DMC

DST can be a useful tool to explain part of what happens in a DMC. The temporal elevated level of motivation prominent in DMCs could be considered a period of stability emergent from the self-organizational reciprocal interactions of a multitude of components. Hence, the stability brought about by DMCs is a phase transition from low-level or no motivation to a high-level motivation which lasts for a finite period of time before moving to another phase. In the chaotic and unpredictable motivational trajectory, the DMC serves to a large extent as a regulator of the motivational system for a specific period of time (Dörnyei et al., 2015).

Another DST property that can be used as a tool to explain what happens while a DMC is in progress is that systems always change so the current state is directly linked to the previous state (De Bot et al., 2007). In a DMC, the individual usually goes through attempts to accomplish a number of sub-goals which in return pave the way for the next sub-goal. Mastering one step serves as feedback to keep the motivation high for the next upcoming steps (Raynor, 1969).

The DST's view that no particular cause is behind any effect (Larsen-Freeman & Cameron, 2008) but a combination of a multitude of variables interact over time to jointly produce a pattern can also be applied in the case of DMCs; DMCs are thought to occur from the combination of a number of time and contextual factors (Dörnyei et al., 2014, 2015).

Furthermore, the notion of temporal predictability in DMCs is compatible with DST. A DMC, however, can be viewed as a regulator of an otherwise completely unpredicted path of motivation; it has the potential to override complexity and chaos. This has significant research implications as, in the chaotic world of complexity, the

DMC offers a predictable, stable, and therefore empirically researchable alternative (Dörnyei et al., 2015).

3.4.4 Potential limitations

Despite the compatibility, DMCs are conceptualised on the notion of predictability which does not follow the DST's main premise. According to the DMC, the unique coincidence of personal and contextual factors prepare the ground for an almost always predictable path of intense motivation. This intensity is also protected by a powerful vision, a facilitative structure and positive emotional loading (Dörnyei et al., 2016). This unique makeup obtains a regulatory vigour that can push aside distractions arising from system fluctuations. However, empirical research is required to further assert this argument.

On the other hand and more generally speaking, although Larsen-Freeman and Cameron (2008) are confident that DST is more than just a metaphor and sooner or later it finds its way to be an established norm of thinking, there are many ambiguities around the theory. Since the origin of the DST goes back to natural sciences (especially mathematics), its applicability in the social sciences especially in L2 motivation—which can be highly implicit and its effect is usually formulated in abstract terms and in relation to other human functioning such as affect and cognition—is highly accompanied by scepticism. As a consequence, much conceptual and terminological confusions remain to be tackled such as attractor, attractor state, initial state, and others. On initial conditions in the L2 learning, De Bot et al. (2007), for example, state that since "many SLA studies are cross-sectional and can therefore not give sufficient insight in the blur of interacting factors affecting the acquisition process, it is very difficult if not impossible to determine the effect of initial conditions on L2

development" (p. 15). The theory is also relatively new to the field and much empirical data is needed to vigorously and convincingly establish itself.

Another problematic area of DST—at least for now—is in its researchability. There are still shortcomings in regard to established methods and templates (Dörnyei, 2009b). While one of the methodologies suggested for DST research is computer modelling (Larsen-Freeman & Cameron, 2008), artificial networks can never be compared to the real human experiments, and at best they serve only as a way to enhance our understanding (Meara, 2004; De Bot et al., 2007). Furthermore, there are still "too few specific details about emergent processes—particularly with regard to SLA—to evaluate their explanatory power" (Dörnyei, 2009b, p. 116). Thus, we can use DST as an additional tool without disregarding the previous established norms of thinking and research. It is therefore useful to summarise the limitations of DST in Ionin's (2007) words that DST's contributions "are at this point largely hypothetical" and thus much of DST "is devoted to critiquing existing approaches to SLA without offering a tangible alternative. More importantly, some of these critiques appear to be empirically inaccurate" (p. 27).

3.5 Theory of planned behaviour

3.5.1 History and main features

The theory of planned behaviour (TPB) is an extended version of the theory of reasoned action (TRA) which was developed by Martin Fishbein and Icek Ajzen in 1975 (Ajzen, 1991; Fishbein & Ajzen, 1975)—although its research program goes back to two decades earlier (i. e. the 1950s; Ajzen & Fishbein, 1980)—mainly as a method to predict but also explain the human behaviour. The TRA emerged as a response to the dominant thinking of the time that general attitudes and personality traits failed to

accurately predict human behaviour especially in specific situations. Wicker (1969), for example, had showed that there was little evidence to support stable attitudes and called on researchers to specify their conceptions of attitudes. Similarly, Mischel (1969) had challenged the conventional thinking of personality as stable and broad individual differences.

As from the name, the theory of reasoned action assumes that people make decisions rationally and "make systematic use of the information available to them" (Ajzen & Fishbein, 1980, p. 5)—not based on unconscious or automatic drives or desires. The main element underlying the TRA is the concept of behavioural intention which is presumably the determinant of most of human actions (Ajzen, 1985). Intentions determine how hard one is ready to try and how much effort one invests to perform a certain behaviour because they "are assumed to capture the motivational factors that influence a behaviour" (Azjen, 1991, p. 181). However, since intentions do not provide reasons for why people do what they do and is only used for general predictability of behaviour, in order to understand them, the theorists attempted to determine the underlying factors behind intentions.

Behavioural intentions are thus determined by two main factors: attitudes towards the behaviour and subjective norms. Attitudes refer to the personal positive and negative evaluation of the behaviour, and subjective norms are perceptions of the pressure put on the individual by the society and important others (Ajzen, 1985). However, in an attempt to account for the very determinants of these attitudes and subjective norms, the TRA presented the role of beliefs; an individual holds specific beliefs about any particular behaviour based on the salient information he/she attends to at a particular moment. Thus, behavioural beliefs affect attitudes towards the behaviour and normative beliefs determine the subjective norms (Azjen, 1991).

Since its emergence, many empirical studies have been conducted to test and confirm the validity of the TRA. In a study on mothers' intentions in regard to how they fed their babies and their actual actions in six weeks following delivery, Manstead, Proffitt and Smart (1983) provided empirical support for the TRA. Earlier, the theory was applied in a number of domains such as: predicting and understanding women's occupational orientations (Sperber, Fishbein, & Ajzen, 1980), consumer behaviour (Fishbein & Ajzen, 1980), voting in American elections (Fishbein, Ajzen, & Hinkle, 1980), and changing the behaviour of alcoholics (Fishbein, Ajzen, & McArdle, 1980). Confirmatory findings were also presented in studies on the practice of testicular self-examination (Brubaker & Wickersham, 1990), understanding and promoting AIDS-preventative behaviour (Fisher, Fisher, & Rye, 1995), and moral behaviour (Vallerand, Deshaies, Cuerrier, Pelletier, & Mongeau, 1992).

Nevertheless, the TRA encountered major limitations that pushed its theorists to put forward important modifications. Intentions can predict behaviour only if they remain stable from the time they exist to the time of action. However, intentions are subject to change from the effect of a number of factors, such as time and individual differences. People naturally tend to change their minds with the passage of time, as a result of new events and new information leading to changes in their salient beliefs, changes in confidence and commitment toward the behaviour, and also due to differences in personality. Moreover, the TRA seemed to apply limitedly to only behaviours that were under the individual's volitional control. Many types of behaviour such as losing weight, learning a second language and maintaining high motivation for an extended period as in DMCs, however, are not fully under volitional control, because they are subject to the influences of internal factors like individual differences, having the right amount of information and abilities, will power, emotions, and external factors

such as time and opportunity and assistance from others. Because of these limitations and that in many cases, "behavioural intentions will often be better predictors of attempted than actual behaviour", a theory of planned behaviour (TPB) was suggested (Ajzen, 1985, p. 30).

In addition to adopting attitudes and subjective norms, the most significant element of the TPB is the perceived behavioural control (PBC) which is based on the belief that one possesses the required skills and opportunity to perform a certain behaviour through his/her control over all the internal and external obstacles that make merely having intentions insufficient to carry out the behaviour. PBC is assumed to have a direct influence on behaviour and an indirect influence on behaviour through intentions; the direct influence occurs when the individual does not have full volitional control over the behaviour, and when the perception of control is accurate (Madden, Ellen, & Ajzen, 1992). When realistic, PBC can serve as a substitute to the actual control over the behaviour (Ajzen, 1991). The concept of the PBC is derived from Bandura's (1978) self-efficacy construct; behaviour is affected by the degree of confidence people have in their ability to carry it out, and thus their choice of actions, effort, and emotional resources are properly used (Ajzen, 1991). From the above, the TPB is now the combination of three elements (attitudes, subjective norms, and self-efficacy) and each of them has a unique contribution to predicting and understanding behaviour (De Vries, Dijkstra, & Kuhlman, 1988).

Ajzen and Madden (1986) conducted the first complete study of the TPB through researching students' class attendance. They showed that, in addition to attitude and subjective norm, perception of control can improve the prediction of behaviour and increase motivation. However, the effect of PBC was only valid when the behaviour (getting A from a course) was only partially under volitional control, and the perception

was accurate based on feedback provided. Also, supporting an earlier study on the TPB and weight loss (Schifter & Ajzen, 1985), no significant interaction was found between the main variables (i.e. intentions and PBC). The lack of interactions led Ajzen (1991) to anticipate a direct link between PBC with the target behaviour as opposed to the effect through intentions (Armitage & Conner, 2001).

Subsequent studies also tested and provided general support for the modified version specifically with the inclusion of the PBC and control beliefs: for example, comparative studies between TRA and TPB by Madden et al. (1992), intention to quit smoking (Hu & Lanese, 1998), improving training outcomes (Santhanam, 2002), intentions to attend a sport event (Cunningham & Kwon, 2003), investigating the determinants of recycling behaviour (Tonglet, Phillips, & Read, 2004), physical activity intentions (Duncan, Rivis, & Jordan, 2012), and more recently, why people are coming back to the Facebook (Al-Debei, Al-Lozi, & Papazafeiropoulou, 2013). Some of these studies have argued for modifications to the original approach, such as a distinction between different kinds of attitudes (evaluation and effect; Ajzen & Timko, 1986), and the inclusion of additional variables like moral norms (for example in a study on predicting dishonest actions; Beck & Ajzen, 1991).

3.5.2 TPB and L2 motivation

No specific research has encompassed the motivational effect of the TPB on L2 learning (to the best of my knowledge). However, the very first L2 motivation model, the social psychological approach presented by Gardner and Lambert (1959) considered the learner's attitude toward the L2 community as the main motivating incentive to study a second language. In the later models of the perspective, it was assumed that language attitude had direct impact on goal salience, valence, and self-efficacy (Tremblay &

Gardner, 1995). The revised model was presented upon L2 motivation researchers' call for exploring mainstream psychology theories that could inform L2 motivation (e.g. Dörnyei, 1994b, Oxford & Shearin, 1994). In the Willingness to Communicate (WTC) approach, which assumed that attitude toward the language learning and support from the social environment could motivate people to communicate in the target language (Maclntyre, Baker, Clément, & Conrod, 2001), the TPB's main elements have been incorporated; behavioural intentions can indicate L2 learners' willingness to communicate once opportunity is available, and their willingness is usually only partially under their volitional control (Maclntyre, Dörnyei, Clément, & Noels, 1998).

3.5.3 Implications for the DMC

The theory of planned behaviour can inform the DMC phenomenon in many ways. Firstly, the correlation between outcome value and salient beliefs presented through expectancy-value model is also present in DMCs; individuals experiencing DMCs believe that the outcome of the attempt (goal) is valuable, and that belief influences their attitude toward the behaviour. In terms of application, in preparing L2 learners to experience DMCs, it is crucial to start with changing any negative attitudes through modifying salient beliefs. Moreover, there is also a possibility to influence the individual's attitudes through influencing the attitudes of important others (subjective norm).

The element of perception of control can also provide significant implications to DMCs. In most DMC cases, the behaviour of interest is probably at least partially beyond one's volitional control; this is especially true in L2 learning which is largely dependent on a variety of factors that might be extremely hard to fall under the learner's full volitional (i.e. actual) control. As for the second condition of the effectiveness of

PBC, the perception of control can be made as accurate and realistic as possible through the use of feedback about the progress (Ajzen & Madden, 1986).

Another area of importance is the notion of spontaneous intentions. Ajzen (2005) partially supports the idea that some behaviours tend to become habitual routines with repeated occurrence. While he reports limited support for the perception that in stable contexts, behaviours seem to be conducted automatically without conscious intentions, he suggests that "rather than coming under the control of stimulus cues, routine behaviours may be controlled by behavioural intentions that are spontaneously activated in the familiar context" (p.115). Similarly, in a DMC, one no longer requires the activation of cognition for engagement.

3.5.4 Potential limitations

Nevertheless, the theory of planned behaviour is not without its own critics. In a meta-analysis by Armitage and Conner (2001), it is argued that the supporting studies of the TPB are based on a limited data set, analyse data from samples more than once, do not provide reliability statistics, and are the studies are dealt with as equivalent. Moreover, the role of subjective norm as an influential variable has been questioned.

More generally, though the TPB provides some useful conceptual framework for the DMC based on research findings, it does not provide details on the exact reasons for why PBC can have a direct effect on behaviour, what represents actual control and how to assess it (Ajzen, 2005), and how exactly feedback can influence accurate perception of control. Moreover, the intention-behaviour prediction seems to be more valid with short term activities (Ajzen, 1985).

3.6 Self-determination theory

3.6.1 History and main features

The self-determination theory (SDT) is based on the main assumption that, human beings are naturally—unless hindered by the social environment—active, curious with a great passion for learning and self-regulation, and spontaneously self-motivated to develop and grow (Ryan & Deci, 2000b). This tendency toward learning is intrinsic, and not due to any external rewards or gains (Deci, Koestner, & Ryan, 1999). The fact that many people cannot seem to strive for growth and excellence is not due to some genetic biological differences, but mostly because of challenges posed by the social environment. This view can also explain individual differences, because some individuals can be active and motivated in certain selected contexts or situations but passive in other circumstances (Ryan & Deci, 2000b).

SDT was first developed from research on the impact of extrinsic rewards on intrinsic motivation (Deci, 1971). In two laboratory and one field studies divided into three periods, the intrinsic motivation of some college students was tested by paying them to do what they intrinsically liked, and this led to a reduction in their motivation. Since then, tens of similar studies have been designed, conducted, and affirmed a similar theoretical hypothesis; Deci et al.'s (1999) meta-analysis, for example, reports 128 of such studies. The underlying explanation for the effect of intrinsic motivation has been based on and interpreted in terms of humans' natural tendency toward or need for self-determination and autonomy (Deci & Ryan, 2008). In turn, this innate need is either supported or hindered by the social environment, and any external factors (such as reward, threat, punishment, competition) that undermine this need will in turn undermine the intrinsic motivation; any tangible or symbolic reward that is "expected" and its "receipt required engaging in the activity" decreases intrinsic motivation (Ryan

& Deci, 2002, p. 11). However, in Deci's (1971) studies, for example, verbal reinforcement and positive feedback increased intrinsic motivation, and unexpected rewards had no negative impact on intrinsic motivation (Deci et al., 1999). The SDT's account for intrinsic-extrinsic dichotomy is based on an earlier concept by Richard DeCharms called the perceived locus of causality which assumes that in intrinsic motivation people perceive the locus of their initiation and regulation to be originated from their own selves, whereas in extrinsic motivation it is conceived as imposed by external sources (Ryan & Deci, 2002).

The fundamental principle of DST is the notion of basic needs. These basic needs are necessary in order for human beings to thrive. However, they are not specific to any specific setting but universal across cultures and developmental stages (Ryan & Deci, 2002). The theory is then based on three main needs (Deci & Ryan, 2000b; Ryan & Deci, 2002):

- Need for Competence: it is the feeling of being effective in one's interactions with the social environment and finding and experiencing opportunities to display and express one's capacities.
- Need for Autonomy: it is the feeling of ownership or agency of one's behaviour. The concept of autonomy from DST's perspective does not mean independence or individualism; it refers to the endorsement of a behaviour out of interest and integrated value, and an endorsed behaviour represents experience as "an expression of the self" (Ryan & Deci, 2002, p. 8). Furthermore, when autonomous, individuals might act dependently or independently, alone or with others as long as they maintain a feeling of volition, and collectivistic orientations (versus individualism) might indeed enhance autonomy (Deci & Ryan, 2000).

- Need for Relatedness: it is the feeling of relatedness to the social community and a sense of belonging. Unlike competence and autonomy, the need for relatedness has received less support, leading Deci and Ryan (2000) to suggest that relatedness is of a more distal importance.

Since its emergence in 1970s, SDT evolved in the following three decades in the form of a number of mini-theories, each related to a specific phenomenon, yet they all share the three basic psychological needs mentioned above. These mini theories are (Ryan & Deci, 2002):

- Cognitive evaluation theory is concerned with effects of social contexts on people's intrinsic motivation.
- Organismic integration theory deals with internalisation and integration of values.
- Causality orientations theory is mainly concerned with individual differences in human being's tendencies to associate with the social environment.
- Basic needs theory focuses on the more general link between motivation and goals to health and well-being.

The focus on intrinsic motivation is prominent throughout all claims made by SDT. However, since much of what people do, especially in educational settings, tend to be originated, regulated, and administered by external forces, the room for intrinsically motivated behaviours remains limited. Therefore, an important relevant area of SDT is its Organismic Integration Theory which is applied to behaviours that are not intrinsic per se. Hence, in dealing with extrinsic motivation, SDT distinguished between four types of extrinsic motivation (Pintrich & Schunk, 2002; Ryan & Deci, 2000a):

- External Regulation: motivation is to meet an external reward or an imposed behaviour to which the person does not have any internal interest but experiences a feeling of being controlled.
- Introjected regulation: motivation to perform an action not from interest but to avoid shame, guilt, or anxiety (i.e. controlled by pressure).
- *Identification*: the individual identifies with the significance of an activity and accepts it, because its value has personal meaning or importance.
- Integrated Regulation: this occurs when people have fully identified with the behaviour which is assimilated to the individual's self. Behaviour is fully in line with one's values and needs; therefore, it is the closest to intrinsic motivation, even though engagement is not intrinsically motivated but triggered by an expected valued outcome.

SDT attempts to transfer extrinsically-motivated behaviours to more self-determined and autonomous types such as those seen in identification, and then to integrated regulation. The process by which SDT makes such transformation is called internalisation, defined as a "natural tendency to strive to integrate (or take into one's self) socially-valued regulations that are initially perceived as being external" (Koestner & Losier, 2002, p. 101). Internalisation is triggered by the perception that the activity or the goal in question is valuable or meaningful (Koestner & Losier, 2002). The question is then, how does value help individuals to internalise goals?

Ryan and Deci (2000b) believe that the source of internalisation and integration comes from goals that are valued, encouraged, or modelled by important others. This notion however relates the source of value in part to other people's appraisal of behaviour. On the other hand, while Kasser (2002) assumes SDT can be enriched by adding the value perspective to it because this incorporates a cognitive/affective element

that helps in accounting for the "enduring personality functioning" (p. 125), he proposes six value prepositions that can be integrated to the SDT implications. What is potentially related to the discussion here is that, values are stemmed from the self and derived from needs. Therefore, motivation to carry out extrinsic behaviours suffers unless the extrinsic values behind them are internalised, and those extrinsic values have to be made related to the individual's needs for autonomy, competence and relatedness.

Nevertheless, internalised behaviours also need to be accompanied by an effective blueprint and self-regulation. According to Koestner and Losier (2002), in order to do well in achieving a goal and at the same time enjoy the process, one has to exercise self-regulation strategies that concentrate on the immediate task and the long-term benefits (future goal)—i.e. both intrinsic motivation and identification. Therefore, they believe that even completely intrinsic behaviours need internalisation in order to be goal-oriented and follow a developmental path. As such, even if one is interested in, for example, learning an L2 for its own sake, one still needs to follow a practice and training programme for learning.

Also, SDT distinguishes between different levels of self-regulation; high level self-regulated actions are characterised by a feeling of volition, willingness and endorsement without any outside pressure, whereas low level self-regulation is motivated by pressure from others and external factors. Interpersonal and developmental environments considerably determine the level of self-regulation strategies people use (Deci, Ryan, & Williams, 1996).

In addition to intrinsic and extrinsic motivation, people might experience a third type of motivation called amotivation, characterised by the lack of motivation to act (Ryan & Deci, 2002). However, the distinction between intrinsic and extrinsic motivation, and amotivation may not always be that straightforward. Therefore, in order

to identify and direct people's motivation, Vallerand and Ratelle (2002) propose three levels of generality:

- The global level (stable personality types);
- The contextual level (motivation in different domains such as educational, organizational, etc.);
- The situational level (motivation at a specific time).

All these levels have to be taken into account while examining an individual's motivation so that specific measures can be prescribed.

3.6.2 SDT and L2 motivation

The pioneering researcher who tested the principles of SDT in L2 motivation was Kimberly A. Noels, although the role of interest and intrinsic motivation in the L2 literature had been discussed before in the works of Brown (1990) and Dörnyei (1994a), for example. In an initial attempt to investigate the validity of a scale of intrinsic and extrinsic motivation for L2 acquisition, Noels and colleagues studied university students learning French as an L2, and the results confirmed that first, L2 motivation can be assessed by the SDT's scales of amotivation, internal and external motivation. Second, intrinsically motivated students were more comfortable, persistent, and less anxious. Moreover, they found that among the four L2 motivation orientations system of Clément and Kruidenier (1983), the Instrumental orientation correlated with External Regulation, while Travel, Friendship, and Knowledge orientations correlated with intrinsic motivation (Noels, Pelletier, Clément, & Vallerand, 2000).

Noels et al.'s (2000) model was extended by adding a new dimension which is the role of the immediate classroom environment (Wu, 2003); a study involving young Chinese learners of English suggested that providing choice in material, method, and

evaluation, and strategy training leading to perceived autonomy were crucial for L2 intrinsic motivation. Furthermore, the quasi-experimental study found that "predictable learning environment, moderately challenging tasks, necessary instructional support, and evaluation that emphasised self-improvement and attributed success or failure to controllable variables were effective ways to enhance young learners' self-perceptions of L2 competence" (Wu, 2003, p. 501).

3.6.3 Implications for the DMC

A DMC is entirely self-governed and the individual owns the whole process; however, certain time and contextual factors foster its emergence and sustainability (Dörnyei et al., 2015). SDT's conceptualisation of the role of social environment can be used to explain some of these contextual factors. For SDT, internalisation is possible when the social surrounding provides important psychological nutrients to satisfy the needs for autonomy, competence and relatedness (Koestner & Losier, 2002). Thus, we might assume that in an environment which does not offer the opportunity for experiences that reflect those needs, a DMC cannot be expected to occur.

3.6.4 Potential limitations

Some theoretical criticism of SDT comes from the view that excess freedom and choice for self-determination as evident in many of the modern domains of our lives is in fact harmful (Schwartz, 2000); it can bring a sense of overwhelming and dissatisfaction and even depression. As in respect to DMCs, it is not clear if internalisation of extrinsic goals always leads to motivated behaviour; although a DMC needs a personally valuable goal, merely a goal does not necessarily generate a DMC. Furthermore,

whereas SDT proposes the need for self-regulation, a DMC relies on self-propelling engagement (Dörnyei et al., 2014).

3.7 Future time perspective

3.7.1 History and main features

While the theory of time perspective (Zimbardo & Boyd, 1999) involves a number of interrelated issues, my coverage here encompasses only what is related to motivation; how the temporal sense of time can help learners reinforce and sustain their motivation. Time perspective (TP) simply refers to people's understanding of their psychological time (Kauffman & Husman, 2004) and "emerges from cognitive processes partitioning human experience into past, present, and future temporal frames" (Zimbardo & Boyd, 1999, p. 1271). TP is not limited to only the future's influence on shaping the present but also the past's; in fact, many earlier motivation theories restricted the influence of the past experiences on the present motivation. However, it might be credulous to assume that the current behaviour is merely due to the built-up experiences of the past. Despite the past, human behaviour is considerably associated with an aim towards the future (Nuttin, 1964). Future time perspective (FTP; Nuttin, 1964; Zimbardo & Boyd, 1999) emphasises the role of future utilisation in changing motivation and self-regulation. Although the role of future on the current motivation has been studied in other theories such as future possible selves, expectancy-value and many social-cognitive theories, the available research is not quite well coordinated, and thus the best account for the cognitive and affective effect of future conceptualisation is discussed within the FTP theory (Kauffman & Husman, 2004). FTP can generally be defined as "the present anticipation of future goals" (Simons, Vansteenkiste Lens, & Lacante, 2004, p. 122).

Nuttin (1964) was one of the pioneering advocates of FTP who associated FTP with basic cognitive properties that distinguish humans from other animals who are mostly concerned with the here and now. Many researchers and theorists of FTP agree that future-orientation is a function of individual differences (e.g. Zimbardo & Boyd, 1999; Simons et al., 2004) in that some individuals are able to link their current behaviour with its future implications while others seem to be less possessive of this trait. People who tend to delay their gratification and expect results in the future can be classified as "top-down" while others who prefer the present are "bottom-up" (Zimbardo & Boyd, 1999). However, Nurmi (1991) described future-orientation in terms of a cultural and family background influence; individuals learn to be more future-oriented from the nurture provided in the family environments. This view, according to Nurmi, is more in line with modern psychological thinking, as opposed to the notion of individual differences which places little emphasis on the role of environment and emotions.

Many motivation theories have to some extent ignored the importance of future and focused on the present dimension of the behaviour; flow and self-determination theories, for example, assume that intrinsic motivation is by far more fruitful than extrinsic reasons, implying an emphasis on the enjoyment and the quality time spent on learning tasks. However, learning tasks are not always based on intrinsic motives, and despite being tedious, one must still perform them. FTP can serve as a motivational force in generating interest and persistence in learners to engage in uninteresting yet essential activities (Kauffman & Husman, 2004).

Previous conceptualisations of FTP (e.g. Nuttin, 1964) linked the origin of FTP to the concept of need that pushes the individual to believe that something is needed which can be represented in a goal. Later, Ladousse (1982) expanded the concept of

need further to become want instead. According to this perception, need represents a general inclination while want is a stronger stage in which one carries out behaviour toward the goal. Moreover, while "need" can initiate motivation, the "want" tendency is the actual motivational power that maintains motivation and keeps an interactional balance between the individual and the future goal.

In an attempt to integrate the cognitive theories of motivation to FTP, De Volder and Lens (1982) conducted a study involving 251 high school students to measure the link between academic achievement and FTP. The findings affirmed that students performed better (both in displaying higher persistence and achieving higher grades) when they (a) attached a higher valence to distant future goals and (b) gave higher value to what they were currently doing (studying) as an instrument to reaching the future goal. Thus, a distinction was made between two aspects of FTS (Shell & Husman, 2001): cognitive (high value of current attempt as a means to reach future goal), and dynamic (high valence to distant future goal). Cognitively, it is assumed that FTP helps people to conceive the distant future as being nearer. As a result, this makes them more resistant and motivated to engage in the current activities leading to that goal. However, when the future goal is too far or too near, FTP is expected to have no motivational influence (Simons et. al., 2004).

The dynamic aspect has also been referred to as utility value, instrumentality, or connectedness and is subdivided into two dimensions and four types (Shell & Husman, 2001; Simons, Dewitte, & Lens, 2000; Simons et al., 2004):

First dimension: whether the skills needed for current activity is also useful for future task performance; for example, whether learning an aspect of the L2 is useful to be a good L2 speaker, or it is just a compulsory subject.

Second dimension: this concerns the reasons behind engagement in the task and the types of regulations, and this includes four types of instrumentality:

1. Low utility-extrinsically regulated: the current task is extrinsically motivated; for example, studying for a reward or grades not because it is useful for future.
2. Low utility-internally regulated: future goal is not directly related to the current behaviour which is intrinsically motivating in itself; for example, learning an L2 for a sense of personal fulfilment.
3. High utility-externally regulated: working for future goals for external rewards; for example, learning an L2 to get a good job in the future.
4. High utility-internally regulated: working for future goals that are internally regulated; for example, studying to become a successful L2 user in the future.

Based on their empirical studies, Simons et al. (2000 & 2004) concluded that (a) individuals who perceived their current behaviour as an important instrument for now and their future goals are more motivated, and (b) internally regulated learners are more task-oriented as opposed to performance-oriented and show a greater degree of persistence than externally regulated learners.

Support for FTP's impact on motivation is backed by a number of empirical studies. In addition to the study by De Volder and Lens (1982) mentioned earlier, Lens and Decruyenaere (1991) examined high school students' motivation in relation to the usefulness of studying for life in general, and found a linear relationship between the two. Zimbardo and Boyd (1999) reached the conclusion that failure is not related to intelligence deficiencies but the lack of FTP in contexts where goal setting and delay of gratification are required. More recently, Husman, McCann and Crowson (2000) tested the relationship between volitional strategies and the perception of instrumentality, and concluded that the two are growing in time and that the use of volitional strategies can

enhance the role of instrumentality on motivation and thus achievement. In a study on the links between FTP and students' learning, Peetsma and van der Veen (2011) found a positive influence of the FTP on academic achievement through investing more effort in learning. On the impact of FTP's valence and instrumentality (dynamic and cognitive aspects) on students' career decisions, Walker and Tracey (2012) found a positive association between students' ascribing value of current behaviour to self-confidence and motivation while no such a relationship was found between valence and motivation. They attributed the latter finding to the students' lack of understanding of the realities of the skills required to reach valuable future goals.

Despite the general role of FTP on motivation, the content of future goal (intrinsic or extrinsic) has recently received great attention which refers to applying SDT's main claims to FTP. Subjects have been studied in terms of future intrinsic goal (personal development) and future extrinsic goal (external gains); results confirmed the positive link between the greater influence of future intrinsic goals on performance, persistence and overall achievement, and that focusing on a future extrinsic goal might undermine people's motivation and performance at the current time (Simons et al., 2004). However, it is possible that initially extrinsic goals can be internalised and the person will begin to intrinsically enjoy the current activities leading to future goals. This happens when the person becomes conscious of the personal consequences of the current tasks, and thus the focus shifts from being totally on the present performance and its immediate outcome to a task-orientation and delayed final evaluation. In the long term, this might even reverse the extrinsic task into intrinsic, from boring to interesting (Sansone, Weir, Harpster, & Morgan, 1992; Simons et. al., 2000).

3.7.2 FTP and L2 motivation

To the best of my knowledge, there has not been any direct application of the FTP views on L2 motivation. However, it has been applied in educational settings. For example, it has been noticed that some students perceive the instrumentality of practical courses more than theoretical lessons (Creten, Lens, & Simons, 2001); therefore, teaching students of the importance of perceived instrumentality has been advocated. However, the perceived instrumentality alone might not be sufficient. In a study involving learners of French (Creten et al., 2001), learners did not perform well despite their appreciation of being able to speak French in the future. This implies the need for the presence of other measures such as effective teaching methods and course content.

3.7.3 Implications for the DMC

The main element of FTP that can be used to explain why people maintain a motivational surge during a DMC is the concept of instrumentality. While what one currently does might not be of any intrinsic interest, while experiencing a DMC, one performs tasks leading to a final goal with great enthusiasm. This is explained in terms of his/her acknowledgment of the fact that the current activities lead to a future state worth investing the time and effort. Nonetheless, whether the motivation to perform current tasks becomes fully intrinsic (as claimed by FTP) requires further investigation in the DMC context which mostly receives motivational power from a personalised goal or vision (Dörnyei et al., 2016).

A significant area of FTP research, that can inform DMCs, has focused on the importance of subgoals in making instrumentality more effective. Miller and Brickman (2004) suggested a model of motivation and self-regulation that incorporates a system of proximal subgoals because subgoals or proximal tasks "that are perceived as

instrumental to reaching personally-valued future goals have greater overall incentive value and meaning than proximal tasks lacking this instrumental relationship, and their impact on task engagement is correspondingly greater" (p., 9). This also suggests the need for clearly defining subgoals to capture their instrumentality value. This element is strongly related to the notion that DMCs can be maintained through a number of proximal subgoals leading to the future goal.

3.7.4 Potential limitations

FTP's main contribution is its stress on an awareness of the utility value of current behaviours for future. While this view has significant implications for the current motivation, this perspective is not exceptionally novel. After all, the link between present and future is reflected in and is at the heart of almost all goal theories, which for long postulated that future states cannot automatically motivate the present actions unless they are represented cognitively in the present (Bandura, 2001). Expectancy-value theory has also emphasised that current behaviours can be motivated in the prospect of a valuable outcome resulted from a future state (Oxford & Shearin, 1994; Wigfield, 1994).

As for the DMCs, FTP's benefits might be restricted to cases in which L2 learners feel that what they engage in now is of little use for their future as proficient L2 users, as when they need to study theoretical aspects of the target language. However, this perception may not be dominant in L2 learning vs. other theoretical school subjects (Creten et al., 2011). Moreover, as seen in Creten et al.'s (2011) study, the perception of instrumentality might nevertheless not lead to increased motivation while other relevant factors are not supportive.

3.8 Theories of self-imagery and vision

As vision was discussed in some detail in Chapter 2 and to avoid repetition, I will only refer to unmentioned aspects.

3.8.1 History and main features

The concepts of mental imagery and vision have become particularly prominent since the 1980s in almost all areas of psychology (Taylor, Pham, Rivkin, & Armot, 1998; van der Helm, 2009). The introduction of dual coding theory by Allan Paivio which was based on explaining behaviour in terms of verbal and imagery representations (Clark & Paivio, 1991) paved the way for such prominence, especially in the field of sports psychology. Vision can be defined as using images especially ones imagined to occur in the future, or an image that exists in people's imagination (Taylor et al., 1998). Mental imagery is the psychological term used to describe people's use of envisioning a future state, especially a future self-image (Dörnyei, 2014).

Similar to FTP mentioned earlier, mental imagery and vision are concerned with directing current experiences toward a future goal. Vision, however, is different from a goal; a goal is a cognitive construct which can be defined as a desired end, whereas a vision is a desired future associated with a tangible, sensory image in the imagination of the person (Dörnyei & Kubanyiova, 2014). Thus, the individual sees himself or herself in the moment achieving the goal. This sensory element is believed to add a considerable motivational power to an abstract goal. Therefore, two individuals with the same goal might experience different levels of motivation depending on their utilisation of mental imagery (Vasquez & Buehler, 2007).

How does mental imagery motivate behaviour? Imagining future goals might affect our motivation by increasing our likelihood estimates, our ability to stick to

behaviours leading to that future, our preferences in regard to the goal-leading tasks, and how successful we will be at those tasks, and all that occurs because some predictions of a future goal might indeed serve as a commitment (Johnson & Sherman, 1990). These are thought to be the function of the outcome of self-knowledge, which is one's ideas of what one might become, what one would like to become, and what one is afraid of becoming (Markus & Nurius, 1986). Through being conscious of one's discrepancy, one tends to strive in order to fill in the gap between one's current actual selves and the selves one wishes to bring about (Higgins, 1987). Hence, we can discuss vision and mental imagery in terms of people's motivation to change; in fact, a theory of vision can be labelled a theory of change (van der Helm, 2009). The mechanism that vision influences motivation is through the inspiration that transformation (from actual to ideal/ought-to) is possible.

However, according to van der Helm (2009), in order to be motivational, three mandatory elements of vision are to be present: future, ideal, and deliberate change. Any possible or likely self is not vision; the future self in vision is the preferred self which is the selected one among many potential others. On the other hand, the desire for a deliberate change in one's future is more powerful and explicit in vision than in any other future theories. This desire for change is expressed in explicit verbal statements or images which are able to initiate, direct and sustain people's motivation.

Thus, vision is important because it is considered one of the highest-order forces influencing motivation, for both short and long-term goals (Dörnyei & Kubanyiova, 2014). The influence of vision and mental imagery on motivation has also been discussed in terms of a number of more specific mechanisms (Taylor et al., 1998); mental stimulations help people see the future goals as real, specific and concrete; they motivate people to set a working problem-solving plan; they evoke strong supporting

emotions towards goals (adding affect to dry cognitive goals); and finally they provoke self-regulatory actions leading to the future goal. Therefore, vision is powerful when it does not remain as imagining and fantasising future states, but mobilises the individual to act on achieving them (Levin, 2000).

3.8.2 Vision and L2 motivation

In Dörnyei's (2005, 2009a) L2MSS (see Chapter 2), three elements have been proposed: Ideal L2 Self (L2 learner's wishes for an ideal self based on his/her preferred future states), Ought-to L2 Self (L2 learner's attitudes that he/she must possess certain attributes to meet the expectations of others), and L2 Learning Experience (motives related to specific learning situations). As discussed in Chapter 2, the third element was added to the original model of Higgins (1987).

Dörnyei and Kubanyiova (2014) describe the long-term motivational power of vision in L2 learning in terms of six sequential components:

- Creating the vision: helping students to specify their visions of what type of L2 user they wish to be in the future.
- Strengthening the vision: helping students to frame their visions to be as specific and clear as possible.
- Substantiating the vision: ensuring that visions are based on realistic expectations.
- Transforming the vision into action: starting engagement in actions leading to the vision.
- Keeping the vision alive: activating the vision via regular reminders so it stays alive and receives adequate attention.

- Counterbalancing the vision: reminding oneself of the consequences of not achieving the vision.

In the last few years, a number of studies have been conducted specifically on the effect of mental imagery use on L2 motivation. Al-Shehri's (2009) pilot study with 200 participants found that visual learners are more capable of developing an ideal L2 self. In a study that examined auditory as well as visual strategies, Kim and Kim (2011) examined the relation between the ideal L2 self and visualization and auditory styles, and found a positive correlation. Dörnyei and Chan (2014) conducted a study on 172 Chinese students and affirmed the significance of both visual and auditory imagery in the development of learners' future self-identities. Additional support for mental imagery and the L2MSS has also been reported in studies by Csizér and Lukács (2010), Papi (2010), Papi and Teimouri (2012), and Magid and Chan (2012), among others.

3.8.3 Implications for the DMC

Since the DMC is a rare and exceptionally powerful motivational phenomenon, having merely a cognitive goal alone might not be sufficient to set up a motivational current. Therefore, it is postulated (Dörnyei et al., 2014) that a vision is an integral part of any DMC (Muir & Dörnyei, 2013). However, the role of vision is important not only for triggering the initial motivation but also for regulating and maintaining it throughout the path (Dörnyei et al., 2016).

On the other hand, studying the concept of self has significant relevance to the DMC construct. A DMC goal is thought to be highly personalised and valuable. Therefore, we might associate the DMC goal with the ideal L2 self, and see it as a mature personal vision (van der Helm, 2009). Moreover, in a DMC, one's self is thought to be strongly linked to one's goal in that the goal becomes integrated with

one's self-awareness, which then directs one's emotions, behaviour, and self-regulation (Leary, 2007).

An important area of the theory's relevance to the DMC is the matter of positive emotionality. Positive emotionality is in part generated due to anticipated and anticipatory emotions brought by envisioning (MacIntyre & Gregersen, 2012). Additionally, Sheldon and Lyubomirsky (2006) found that visualising one's best possible selves was the most beneficial exercise to increase and maintain positive mood which seems to play a great role in motivating the DMC behaviour (Ibrahim, 2016).

3.8.4 Potential limitations

Not all mental imageries are beneficial. Some types of mental imageries might negatively affect motivation as in the case of positive fantasies (Vasquez & Buehler 2007), which include "idealized images of desired events that are experienced positively regardless of their likelihood of occurrence" (p. 1393). This fantasy might substitute actual motivation to achieve the future goal by experiencing it positively in the present. This is an actual danger, especially that there has been little attempt to deal with it.

In a similar vein, vision cannot maintain its motivational power if all the focus is on the goal with no concrete plans to achieve it. Taylor et al. (1998), for example, distinguish between two types of mental stimulation, process-oriented and outcome-oriented. While the process-oriented type is beneficial as it includes setting a future goal and then mentally rehearsing the steps required to achieve it, the outcome approach, however, is concerned with focusing on the outcome of a goal by envisioning that one is already in the position of reaching the goal. The latter is viewed as detrimental as without a detailed plan consisting of specific behavioural actions, it is questionable whether vision receives enough motivational stamina to promote change.

3.9 Process-oriented approaches to motivation

3.9.1 History and main features

Most of the motivation theories have traditionally taken a reductionist approach—that is to take a variable and attempt to use it as a paradigm to account for a large proportion of human behaviour (Dörnyei & Ottó, 1998). These theories have been limited in describing the temporal organization of motivation (i.e. as it occurs in time; Dörnyei, & Ushioda, 2011). As a result, they mainly linked motivation with general personality traits and motives and explained goal-oriented behaviour in terms of "cold-blooded information processing" (Heckhausen & Dweck, 1998, p. 1). One example of these prominent theories is the achievement motivation (Atkinson, 1957) which was developed to "explain how the motive to achieve and the motive to avoid failure influence behaviour in any situation where performance is evaluated against some standard of excellence" (p. 371).

Having been aware of the main limitation of the achievement theory in distinguishing between effects of distant future goals and the immediate outcome of the current activity leading to that goal, Raynor (1969) outlined an elaborate modification to the original theory by presenting a contingent path or step-path theory of action (Raynor & Entin, 1983; Raynor & Rubin, 1971), which can be considered as of the initial attempts to depict a process-oriented approach to motivation (Dörnyei et. al., 2014).

According to the contingent path theory, a path to a future goal consists of a number of tasks and their outcomes, considered together as steps, and the order of the steps are determined by the individual's knowledge of which steps lead to which outcomes (Raynor & Entin, 1983). Success in the future goal is contingent to success in immediate activity (current step) and failure in the current activity prohibits

advancement in the path toward the next steps; therefore, one's motivation is in part determined by how one is doing in the current task, its probabilities of success, and its instrumental value. On the other hand, a noncontingent path is one in which future orientation does not have any impact on current motivation because one believes that what one does now has no influence on future success or failure (Raynor, 1969).

Raynor (1981) explains this instrumentality in terms of sources of value and psychological career; a person is conceptualised in terms of (before, at the time, after) the contingent steps. After the completion of a step, the individual strives to maintain the value brought by the past success to feel good about oneself at the moment and also as a means to accomplish future steps. By so doing, one is pursuing a psychological career "where the outcomes of opportunities for action serve as a means of self-identity" (Raynor, 1982, p. 220). Thus the immediate activity is motivated by the combination of value resulted from previous outcome (named valence) and positive association of success to the self (self-esteem).

3.9.2 Process-oriented approaches and L2 motivation

In the L2 motivation research, a process-oriented approach emerged in the 1990s by works of Williams and Burden and Ushioda who saw the importance of the temporal structure of motivation (Dörnyei & Ushioda, 2011). However, following Heckhausen and Kuhl's action control theory, Dörnyei and Ottó (1998) developed the most comprehensive process model of L2 motivation. It encompasses two dimensions, action sequence and motivational influence. The action sequence includes the series of intentions made from hopes and desires, which are then represented in goals and then actions to achieve the goals, followed by evaluation. Dörnyei and Ottó have divided the

action sequence into three major phases (Dörnyei & Ottó, 1998; Dörnyei & Ushioda, 2011):

- Preactional phase: this resembles the "choice motivation" which includes decision making processes from goal setting (from hopes, desires, and opportunities) into intention formation (a step further from goal as it also implies goal commitment) and then initiation of intention enactment (involving action plans).
- Actional phase: this stage is concerned with the implementation of decisions and plans (executive motivation) put forward at the preactional phase. This phase includes three main processes: subtask generation and implementation, an ongoing appraisal process, and action control process (self-regulatory strategies to sustain motivation).
- Post-actional phase: this refers to the stage where the goal has been achieved, abandoned or interrupted. The learner is going through a reflective evaluation of the goal, and makes comparison between what was planned for and what actually occurred so lessons can be learned for future endeavours.

This model of L2 motivation was later backed by a study conducted by MacIntyre, MacMaster and Baker (2001) who tested the overlap of a list of motivation scales; action motivation derived from the theory was considered an independent factor along with two other factors, self-confidence and attitudinal motivation.

3.9.3 Implications for the DMC

In reference to the DMC, this model can have significant explanatory implications as it depicts the goal-attainment endeavour in a rather comprehensive account. Instead of focusing on the role of goals alone, it explains the steps along the entire process.

Therefore, the model can be applied specifically to explain the issue of motivational sustainability that characterises DMCs.

This approach to motivation can provide theoretical and practical implications for DMCs. Theoretically, it helps explain how a DMC makes use of a series of interrelated steps whose completion determines subsequent success. On a practical level, the approach can guide any DMC inducing programme so that a comprehensive plan of action is tailored based on a logical sequencing method.

3.9.4 Potential limitations

It is true that the process-oriented approach studies motivation as a dynamic process, but it is still based on the traditional cause-effect relationship which is less in line with the new theorising of motivation as a complex and non-linear phenomenon. Therefore, the approach was described as questionable as "such a patchwork of interwoven cause-effect relationships would not do the complexity of the motivation system justice" (Dörnyei, 2009b, p. 196).

On the other hand, this model is mainly based on the assumption that motivation needs to be protected through the use of volitional control strategies. However, motivational momentum in DMCs is primarily maintained through a self-propelling structure that rules out the need for volitional control (Dörnyei et al., 2014, 2016).

3.10 Conclusion

In this chapter, I surveyed eight major theories of motivation through presenting each theory's main components and propositions. In so doing, the focus has been on areas that I postulated share theoretical and conceptual support for the DMC as a new construct. I started with goal setting theory because the goal element in the DMC has a

considerable significance both in setting up the motivational drive and also maintaining motivation throughout the DMC cycle. The second section provided a summary of flow experiences which share several features with DMCs such as motivational intensity and the experience of optimal levels of performance and productivity. Yet, I displayed the differences between the two phenomena: whereas the focus of flow is on short-term, single episode experiences, DMCs are long-term engagement with salient final goals, and the two also differ in how enjoyment is perceived.

Dynamic systems theory was discussed in a relative detail because of its recency and growing popularity especially in the L2 motivation field. While it can provide a meaningful account for the temporal stability witnessed in DMCs, it was argued that it is of limited use—conceptually and empirically—in part due to inadequate research tools and ambiguity in some of its major components such as attractor states and the role of human agency. A general summary of the theory of planned behaviour and its relation to the DMCs was then presented. Perceived behavioural control, which was subsequently added to the theory, was found to be of particular interest to DMCs especially in regard to one's perception about the feasibility of goal-directed activity. In addition to the control belief, the concept of internalisation in self-determination theory was found to support the notion of goal endorsement and goal value which are processes people in DMCs are believed to utilise.

Despite the role of intrinsic motivation as theorised in SDT, the goal-orientedness feature of DMCs can be explained in light of both future time perspective and theories of imagery and vision, as discussed in detail. Reviewing these two theories suggested that goal-orientedness in DMCs imply a number of accompanying motivational processes (such as perceived instrumentality and positive emotionality) that might explain part of the intense and sustained motivation experienced in DMCs. In

that respect, the process-oriented approaches to motivation were seen as especially relevant in accounting for the temporal aspects of the DMC phenomenon as the integration of both the process and outcome.

The main argument of this chapter has been that whereas aspects of DMCs are evident in many mainstream motivation theories, none of the existing models are individually capable of explaining the DMC experience. Therefore, in addition to being a new motivational phenomenon, the DMC can also be appraised as a theory which integrates salient aspects of the motivation literature in a unified construct.

Chapter 4: Methodology

4.1. Introduction

Directed motivational current is a newly-conceptualised phenomenon both in mainstream psychology and L2 motivation literature. As such, the initial stages of DMC research intuitively concern understanding the phenomenon in its depth through investigating its main features, different aspects, and its motivational properties and sources. Accordingly, this research programme adopted an exploratory approach through studying a number of DMC cases to find common patterns amongst them. In order to obtain rich and detailed data of the DMC phenomenon by a number of individuals and groups who experienced or were involved in at least one DMC, a qualitative research methodology (Silverman, 2013) was seen as most appropriate to achieve the aims and answer the research questions of this thesis. A qualitative research paradigm was seen as particularly useful to obtain thick and exhaustive descriptions of the phenomenon of interest, especially with regard to a newly conceptualised construct for which reaching empirical understanding and discovery is essential (Streubert, 2011). In addition to their propriety for allowing for the emergence of the elusive aspects of the phenomenon in question, qualitative methods also provide research participants the opportunity to shape the empirical world from their perspectives (Duffy, 1987).

4.2 Epistemological considerations

Along with its appropriateness as an investigative tool, the choice of qualitative methods for this research was also based upon a number of epistemological considerations. From a theoretical perspective, motivation does not merely equal variables which can be measured quantitatively such as "effort expended to achieve the

goal, desire to achieve the goal and attitudes toward the activity involved in achieving the goal" (Gardner, 1985, p. 51). It is also the outcome of an individual's thinking patterns and his/her goal appraisal and his/her personal reasons for engagement. In this respect, Ushioda (2001) explains that "motivation may be defined not in terms of observable and measurable activity, but rather in terms of what patterns of thinking and belief underlie such activity and shape students' engagement in the learning process" (p. 96).

Drawing on the concept of effective motivation by Ames (1986), Ushioda (2001, p. 97) further illustrates the conceptualisation of motivation within a qualitative perspective in which "goal-directed activity refers to the content of students' thoughts." Therefore, the use of a qualitative method "is not simply a question of methodology" but it is also due to "the nature of its theoretical focus and empirical purpose" (Ushioda, 2011, p. 96). Hence, as a qualitative construct, effective or positive motivation "is more than the demonstration of effortful activity or even time spent on a task: It is reflected in how students think about themselves, the task, and their performance" (Ames, 1986, p. 236).

Based on this understanding, the research interest here is not merely in the degree of effort displayed in a DMC, but equally, or perhaps more importantly, it extends to what an individual experiencing a DMC thinks of the experience, how he/she appraises his/her nature and quality of engagement, and what the DMC phenomenon means to him/her as an L2 learner. This is particularly important in the context of DMCs as unique motivational experiences and for the purpose of this investigation. This thesis does not intend to merely report a number of DMC cases as an intense motivational phenomenon, but also and more importantly, it aims to investigate how individuals experiencing a DMC depict their experiences, their personal opinions and

sentiments, and what they think of themselves and their performance. As Ames (1986) points out, within a qualitative paradigm, the empirical focus of investigation is not on

> how we can get students more motivated, instead we ask questions such as, why students process or attend to different sources of information, why certain goals are valued over others, what metacognitive processes are used, and how students evaluate and attribute their performance in different achievement contexts (p. 237).

4.3 Sampling

The recruitment aim of this thesis was to find and study a number of DMC cases, both individual and group DMCs. The main initial challenge was to capture actual DMC experiences in participants who would not have any knowledge of the concept. Yet, in order to maintain validity and avoid the risk of leading participants to fit their narratives to what the researcher wanted, no details of what a DMC entailed was given to potential participants—although enough information about the research was provided. To tackle this issue, the recruitment process was divided into two stages.

4.3.1 Stage One

In the first stage and in January of 2014, I made a one-month visit to my home country (Iraqi Kurdistan) and asked friends to survey anyone they knew who would reflect back on their L2 experiences for any periods of extraordinarily intense engagement. Adult individuals were especially targeted on the assumption that they had experienced motivational surges in their L2 learning trajectories in prospect of gaining employment,

scholarships, or other valuable opportunities. I also asked language teachers and educators for a similar experience in their students. Upon receiving responses about the occurrence of such an intense involvement and consent to participate, audio structured interviews were conducted with 24 individuals who reported such an experience in learning an L2, and 1 teacher and a school principal.

A month later, a similar recruiting procedure was applied at a British university, where I asked some postgraduate students for such experiences, whether as L2 learners or in their students. Meanwhile, contact was made electronically (via email and social media) with further voluntary participants who were asked for participation if they had had such an experience. In all these contacts, potential participants were asked to report experiences of intense involvement in L2 learning. A number of participants were asked to make such experiences explicit by drawing their motivational trajectories on a graph (Henry et al., 2015).

4.3.2 Stage Two

Once all the responses were collected, I began a screening procedure to assess whether the narratives were DMC or DMC-like cases. The criteria used to make this judgement were based on the theoretical foundations outlined by Dörnyei et al. (2014, 2015), focusing on experiences described as uniquely intense. A number of cases were rejected that did not meet the DMC criteria. Consequently, a total number of 17 individual and 6 group cases were identified to be potential DMCs. Whereas some respondents provided enough information needed for this thesis' focus, the respondents who had not discussed their use of a structure or did not explain their emotionality in detail were contacted (where possible) to clarify those aspects; they were asked to either take part in a second round of interviews or answer questions electronically (email or social media).

However, in the entire process of data collection, some cases were left out because the respondents were not available for a second round of interview, or contact was not possible. As a result, although some participants' accounts were classified as DMCs, their data were not used for two analysis chapters (i.e. 6 and 7); for example, a DMC case whose participant described their feelings in general terms such as "I was feeling great" but did not go into details, was not considered for the positive emotionality chapter of this thesis (i.e. Chapter 6). As such, the corpus comprised data taken from participants interviewed once, and other participants interviewed twice or thrice.

4.3.3 Longitudinal cases

Along with the data collected in a retrospective manner—that is, asking participants to reflect back on experiences in the past—an additional element of data collection was utilised: longitudinal cases. As DMCs are believed to be long-term currents, it is necessary to incorporate a longitudinal aspect in studying them (Ruspini, 2002), and "it is difficult to imagine a dynamic systems study that does not have a prominent longitudinal aspect" (Dörnyei, 2007, p. 242). Moreover, since our focus is on DMCs as they happen in L2 learning contexts, the lack of a systematic integration of temporal aspects can be problematic (Ortega & Iberri-Shea, 2005).

Through personal contact, a number of MA and PhD students at a British university were invited to take part in the study. Around ten voluntary students came forward to participate, who were all interviewed about their studies and their motivational levels. A general assessment of the initial interviews revealed that a number of them were not witnessing any motivational surges towards their academic studies, and were therefore excluded. The respondents who seemed to be exceptionally motivated were invited to attend further interviews that lasted from December 2013

until August of 2014. Throughout these periodic interviews, three of the participants (Helen, Mateen, and Adam) were judged as proper DMCs and three of them (Carla, Ezhder, and Julia) were not (see below for details on the participants).

4.4 The participants

In order to maximise the chances of studying different DMC cases, a variety of learner populations were targeted. A number of individuals were recruited to retrospectively narrate their DMC experiences and these cases were classified as individual DMCs. A number of postgraduate students were also studied longitudinally to investigate the temporal aspects of motivational and affective dynamics, i.e. follow-up cases. And to study DMCs in groups, a number of teachers were asked to discuss group DMCs in their students, and one school principal was interviewed about a school DMC. The group DMC dataset was also enriched with two group DMC cases that involved interviews with the teacher and a number of students.

4.4.1 Individual DMC cases

Nine cases were considered to be proper DMCs on which the individuals provided sufficient information. Although data from all of these cases were analysed, two participants' account of emotionality were judged to be not making any new contribution. As such, of the nine cases, data from 7 of them will be presented in Chapter 6—which concerns positive emotionality in DMCs. Below is a brief overview of each participant's background (e.g. gender, age at the time of interview, and ethnic background) and a short account of their DMCs.

Alan: male, 28, Middle-eastern

When I interviewed Alan, he was living in London with his German wife whom she had met and married in Kurdistan 6 years before. After their marriage in 2008, Alan went to the German Embassy in Syria to apply for a sponsorship visa to join his wife in Germany. He was told however that he needed to pass a proficiency German test to qualify. Shocked by the news, he immediately decided to take on learning German through attending a course and studying at his hotel room. After what was described as the most intense learning period taking up to 90% of his time, Alan successfully passed the test one month earlier than scheduled by the course provider. I interviewed Alan via phone and in Kurdish.

Ali: male, 33, Middle-eastern

After working for local institutes for a number of years, Ali was aiming at gaining employment with international organisations in Kurdistan. At a job interview, however, he was unable to answer the questions in English which left him extremely frustrated, shocked and embarrassed. On the way out from the interview room, one of the staff urged him to improve his English. This failed interview and the statement incited an urgent and unprecedented sense of need, desire and willingness in him to improve his English. He then immediately started a two-year journey during which learning English became his number one priority and his almost "everything", and family, friends and even his fiancé continuously felt that dramatic change in him and his lifestyle. Through constant progress in learning, he finally got a job at an international organisation in his city. Ali told me that he always wished to go through the same experience. I first interviewed him face-to-face in Kurdistan, and after a few months through Skype, both times in Kurdish.

Omed: male, 37, Middle-eastern

I interviewed Omed twice about his lengthy and intense L2 learning experience face-to-face and in Kurdish. Upon graduation from his university majoring in Farsi, Omed was interested in working for international organisations, and after an internship, he was given a managerial role by his employer who opened a new branch in Omed's native city of Erbil, Kurdistan. Since the language used was mainly English, Omed started improving his English through stories, translation, and correspondence. Although it was a career-related need, Omed attributed the intense experience to his strong passion for learning English to develop his life-long skills.

Kardo: male, 23, Middle-eastern

Kardo experienced an intense current when he entered a university whose instruction was in English. In that new environment, Kardo felt intimated by the fear of being embarrassed for not being able to speak in English as his classmates appeared to be. Therefore, he decided to prove to his teachers and class that his English skills were superior to others'. In the next two years, he developed an unpresented impetus for learning throughout which he spent virtually all his time practicing English through reading and listening to English media and materials. I came to contact with Kardo through a friend and communicated to him via email correspondence. The impact of his DMC was still apparent on Kardo in that he answered my questions in English displaying impressive writing skills.

Louise: female, 26, Eurasian

While still an MA student at her home country of Russia, Louise was interested in changing career from English literature to ancient texts written in Old Norse. Upon a

visit to her husband who was studying in the UK, she met with a potential PhD supervisor. Motivated by the prospect of receiving a scholarship and joining her husband, she spent almost three months studying Old Norse which she described as "the most intense in studying languages". In that period, she used flashcards and took them wherever she went. I interviewed Louise twice and in English when she was at the final stages of her PhD in the UK.

Sahar: female, 26, Middle-eastern

Sahar's DMC started after she started university and met a few friends who shared the interest of watching Japanese anime and learning about the Japanese pop culture, although she had previously had this passion. Sahar attributed her DMC to this group formation and described it as a "group experience" in addition to its individualistic properties; her case was included in all the three analysis chapters as it was both an individual and a group DMC. At the time of interview, she was a PhD student at a British university. She was interviewed face-to-face, in English and in three separate sessions.

Suzan: female, 27, Middle-eastern

Suzan experienced an L2 DMC when she was about 16/17 years old, triggered by a strong outburst of anger when she was unable to understand her older brother and uncle who were speaking in English, and who further irritated her by saying "[one] who doesn't understand, doesn't deserve to know." This incident gave rise to her almost two-year motivational journey, which she described as not only intense, but also "the happiest days" in which, not satisfied with her school's English lessons, she started learning on her own, mainly through watching TV shows late at night to develop her

listening skills. At the time of interview, Suzan was a PhD student at a British university. She was interviewed twice, face-to-face and in English.

Kawa: male, 29, Middle-eastern

Kawa had been out of school for a number of years, and as a result he always felt inferior when others used English in his presence. He used to "hate" the language although he always perceived the importance of it. Once and by accident, he came across some written materials in English and found it "not too difficult" upon reading it. That triggered his two-year motivational journey in which he developed the routine of studying late at night. I contacted Kawa and obtained his answers via correspondence through social media in which he wrote in Kurdish.

Shirin: female, 27, Middle-eastern

As a top student from her university in Kurdistan, Shirin graduated and obtained a college reader position. However, she had always wanted to improve her English skills for her teaching and research career. Although she had tried numerously, she did not believe studying English in her home country would be useful. Once she received the news of winning a government scholarship to study in the UK, her intense motivational current started although she was still in Kurdistan. The intense learning experience continued for a few months before travelling and while she was in the UK studying towards a master's degree. I sent questions about her experience to Shirin via email and received the answers in Kurdish.

4.4.2 Group DMC cases

The data analysed and presented in Chapter 7 on group DMCs were collected from four sets of participants. In addition to Sahar's case, three L2 teachers were interviewed about a group DMC they had identified in their students during their teaching. Data were collected about two DMC cases that occurred during a weekend booster activity about which 3 students from the two groups and their teacher were interviewed or wrote about their experiences (see below). A school principal was also interviewed about a school DMC.

4.4.2.1 Three L2 teachers

Although more than three teachers were interviewed, the other cases were not identified to be group DMCs. All the data were collected in 2014.

Jason

An emeritus American professor who had taught me in my MA studies, Jason immediately recalled a unique group of students who had featured collective motivational momentum in a class he had taught while he was an L2 teacher in Thailand in 1980. After he provided a short summery of the case, I sent him a number of follow-up questions about that class and their experience. All the correspondences were made through social media.

Sophie

Originally from East Asia, Sophie was a fellow PhD researcher when I approached and asked her about a possible DMC case she might have noticed in her teaching. The group DMC she was interviewed about had occurred just about two years earlier (i.e. 2012)

when Sophie was teaching adult learners at a British university. Within two months, I conducted three face-to-face interviews with her, in which she discussed the experience and reflected on her own perception about teaching while teaching the course.

Alia

Also a fellow PhD student, Alia discussed a group DMC case occurred in 2011 in one of her classes while she was a recent graduate teaching English to university students in her home of Saudi Arabia. In a single face-to-face interview, she narrated the experience and provided her insight into the possible reasons for the occurrence of the DMC.

4.4.2.2 The Booster weekend project

Two group DMC cases were collected about a project called the booster weekend project presented to students who were taking a pre-sessional course to prepare them for MA studies at a British university. The duration of the course was six weeks (from beginning of July until mid-August, 2014), and this booster project was assigned to them a week after the start of the course. The course had about a hundred students but the two groups reported here were both from the same class that had 12 students; each group consisted of 6 members.

The groups were given information about the project on a Friday so they could prepare a PowerPoint (PP) presentation and poster in (3–4) days; they had to prepare Saturday, Sunday and Monday (which was a bank holiday) and present their PP on Tuesday in front of the whole course students, teachers and course managers. Each group was given a case study on a particular business topic and they needed to use a business tool to analyse their case, and their presentation was to be assessed

according to four criteria: content, delivery of presentation, language, and teamwork. The group booster activity would account for 20% of their total course mark, and all members of each group would receive the same, collective mark. The pedagogical purpose of the activity was to boost the students' motivation through grouping them to undertake a specific presentation and poster project.

The dataset comprised two telephone semi-unstructured interviews and two structured written accounts as follows:

-Leila: one of course tutors who was teaching the class under study; interviewed over the phone.

-Sami: student leader of group A; interviewed over the phone.

-Tom: student leader of group B; provided answers to via email.

-Huan: student member of group B; provided answers via email.

All the interviews were conducted, and the written accounts were obtained in English; the interviews were transcribed and merged with the written accounts for an inductive analysis.

4.4.2.3 School DMC

The data for this DMC case was collected from the school principal who provided a summary of the experience and answered a number of questions in a 30-minute interview. Although the principal offered to find other participants who were involved in the case such as teachers and even students, this was not feasible; I was on a short trip to my home country where the participants lived. Since the aim of this aspect of research was to explore the likelihood of group DMCs happening in an extended setting such as a whole school, further data collection was not considered necessary. The interview with Safeen was conducted face-to-face and in Kurdish.

4.4.3 Follow-up cases

Below I briefly discuss the follow-up cases including those that did not turn to be a DMC and the possible reasons for why they were not viewed as DMCs.

Helen: MA student, female, 25, Asian

Helen was recruited based on reporting intense motivation and interest while an MA student at a British university. Unsatisfied with her teaching skills, she had made a personal decision to upgrade herself through an MA in applied linguistics. Through a number of regular face-to-face interviews (held in English), she considered her time studying towards an MA as a unique experience because she was involved in what she personally valued and regarded meaningful. After determining the occurrence of a proper DMC, I invited Helen to participate in a two-week period study to follow on fluctuations in her motivation and emotionality including using a chart (see below).

Adam: PhD student, male, 31, Middle-eastern

Adam's DMC started when he received the "exciting" news that he could study towards a PhD in the UK and under a supervisor of his choice. He attributed his motivational surge to the fact that he was now developing skills that would make him what he wanted to be, i.e. a successful researcher. Through a mobile application, Adam had developed a functioning structure that allowed him to check daily progress and maintain commitment. Along with Helen, Adam was invited to take part in my specific focus on emotionality and affective change while in a DMC. All the interviews with him were conducted face-to-face and in English.

Ezhder: MA student, 28, male, Middle-eastern

As one of the MA students whom I interviewed a number of times within a few months, Ezhder was initially motivated—or that is what he thought—mainly because he ambitiously wanted to make considerable changes to his own and his colleagues' teaching practice in Kurdistan. He was studying towards an MA in English in the UK on a scholarship and was eager to develop research skills. Yet, after two interviews and a few months into his MA, he admitted that his motivational intensity had suffered in great part because he was unable to incorporate studying into his lifestyle (see Chapter 5). As a result, although he was initially seen as a proper candidate, Ezhder was the example of a DMC failure. All the interviews with him were conducted face-to-face and in English.

Carla: MA student, female, 29, South American

Similar to Ezhder, Carla was an example of a DMC failure because her initial intense motivation only continued for a short while. Carla was a part-time student and a full-time teacher whose only aim in doing an MA was to learn the theoretical fundamentals of teaching. This personal goal had made her feel passionate about her studies. Although Carla was still interested to do well when I last interviewed her (after a few months into her MA), the lack of an effective structure with study routines to match her busy life led to her decreased motivation. All the interviews were face-to-face and in English.

Julia: MA student, female, 25, European

Although Julia was and remained a motivated student throughout a series of my interviews with her, she was nonetheless not a DMC case. From a holistic analysis of

the interviews, I learnt that her time during her MA was not particularly unique compared to her other life periods. She seemed to be an-always "good student" who utilised highly successful self-regulatory strategies. All the interviews were conducted face-to-face and in English.

Mateen: PhD student, male, 33, Middle-eastern

Mateen was a PhD student at a British university on a scholarship from Iraq. He seemed to be highly motivated and passionate about his studies. I interviewed him twice in which he discussed how he had maintained his intense motivation, and his studies and research had been a main priority despite leading a busy family life. Although he was willing to take part in further follow-up interviews, he was unavailable within a reasonable timeframe due to being busy with his research and family commitments. The interviews were conducted face-to-face and in English.

4.5 Data collection tools

In general, three different data collection tools were used as discussed below:

4.5.1 In-depth interviews

As the most frequently-used technique in applied linguistics (Block, 2000) which is also deployed in almost ninety percent of social sciences research (Holstein & Gubrium, 1995), the in-depth interview was utilised to collect most of the data, based on the perception that it can be an effective data gathering tool (Gillham, 2000) especially in regard to studying motivational experiences (Silverman, 2013). While the efficacy of interviews lies in large part in the researcher's skills, the interview method is especially useful to solicit in-depth accounts of a phenomenon from participants who are given the

opportunity to judge which areas of the phenomenon they wish to focus most (Barbour, 2003). In that sense, participants are not led by the researcher to select from limited questionnaire items as in surveys which aim to measure the links between various variables. In qualitative interviews, both the interviewer and the interviewee share attempts to produce meaning concerning a certain topic or phenomenon (Esterberg, 2002). Therefore, the interview process is "a way of writing the world, a way of bringing the world into play" which is "a simulacrum, a perfectly miniature and coherent world in its own right" (Denzin, 2001, p. 25).

Although structured interviews were conducted at the early stages of recruitment, unstructured interviews were mostly used. The interviewees were asked to describe and narrate their experiences in their own choosing. The participants who were invited to take part in the second or third rounds of interviews were asked more specific questions such as particular aspects of their structural and emotional experiences. In the unstructured interviews, the researcher made frequent use of probing especially because that was considered to be helpful to release anxiety or stress associated with being interviewed. More importantly, as the participants did not have a conceptual basis to embed their experiences in, the use of unstructured interviews was viewed as particularly useful in enabling the participants to discuss "experienced but not necessarily previously reflected-on thought processes" (Henry, 2011, p. 244).

4.5.2 Written accounts

Since a number of participants were not available for direct or interactive interviews (face-to-face or via phone or Skype), they were given the option to provide a written account or protocol describing their experience in detail (Finlay, 2011). This data gathering tool can be used to collect unsolicited descriptive narratives from participants

who have experienced the phenomenon in question. As recommended by Van Manen (1990), the participants are advised to avoid reporting causal explanations or personal opinions about why a certain event happened. Rather, they are encouraged to describe their feelings and reflections while living through the experience.

4.5.3 Emotionality charts

Part of the data presented in Chapter 6 (see below) was collected through charts given to two participants (Helen and Adam) to draw their affective states. The charts were used to measure their emotionality for a two-week period and while in a typical single study session. A decision about the two-week timeframe was made based on these reasons: since moods can be affective states that stay with an individual from hours to several days (Scherer, 2005), it is necessary to utilise a timeframe that well captures the participants' moods. Secondly, since one's mood fluctuates as a result of situational and environmental factors (Watson, 2000), a two week timeframe is thought to identify these fluctuations leading to generating a more comprehensive picture. Furthermore, interviewing the participants a few times during a two week period might be helpful in obtaining data about emotions experienced in recent engagement sessions and about different mood episodes.

The two week timeframe during which the two participants, Helen and Adam, were interviewed was from August 2nd to August 13th of 2014. This period was intentionally selected because Helen was at the final stage of her MA studies at the time which meant that she needed to work independently to produce her dissertation; she was believed to be both autonomous and not under the influence of any coursework or regular contact with tutors and classmates. Adam was also studying almost independently—especially as it was during the summer—in the second year of his PhD

in applied linguistics. As such both autonomy and a sense of ownership—which characterise DMCs—were believed to be in effect.

Over this two week period, they were both interviewed three times each and asked questions about how they felt each day along with a number of other questions about their general feelings. Moreover, in each of the interview sessions, they were asked to chart their affective state and rate their emotionality from (-100 to 100) with -100 being the highest in negative emotionality and 100 the highest in positive emotionality (see page 223 for an example). The participants were asked to rate their affective state in general and while engaged in their latest study sessions—hence, two charts were produced for each participant.

Questions were also asked about whether they had encountered negative emotions, how long they lasted for, and what they did in response. The participants were specifically asked about any occurrences of frustration, lack of interest, or boredom. The reason for concentrating on these emotions was to get as much detail as possible about their affective states while in the process versus just focusing on some other achievement emotions such as sadness or pride which are mainly associated with the outcome (Pekrun, Goetz, Daniels, Stupnisky, & Perry, 2010).

4.6 Data analysis

In total, a corpus of 103,281 words was transcribed. All the interviews were transcribed verbatim. The interviews conducted and the written accounts obtained in Kurdish were then translated into English by the researcher. Despite the advantage of being a Kurdish native and thus grasping the cross-cultural meanings, to avoid issues with translation of data, the researcher later went through the English versions and checked their accuracy against the recordings.

4.6.1 Phenomenology

A phenomenological approach was deployed for the data analysis in order to capture the "universal essence" and meaning of the phenomenon in question as lived and experienced by the participants (Creswell, 2007, p. 58). This method was seen as particularly useful in understanding DMCs as a new phenomenon and with regard to what the participants experienced and how and why they experienced them (Moustakas, 1994). A modified (a combination of descriptive and hermeneutic-interpretive) approach as described by Colaizzi (1978) and Moustakas (1994) was used as below:

1. First, all the interviews and written accounts were merged together and both individual transcriptions and the whole data-set were read several times to obtain a general feel for it. At this stage, all the data were manually coded leading to an initial codes manual.
2. Then, the researcher went through the entire data-set and extracted a non-overlapping list of the significant phrases and statements, treating them as of equal worth (Table 4.2). The criteria used for selecting these statements were: a statement needed to be around a DMC experience (e.g. not giving a general opinion on how to best learn an L2); and it had to provide a new—not repeated—piece of information. However, all the similar codes with variations, slight or prominent, were fully considered.
3. Formulated meanings, that is, interpretive meanings, were produced for each statement.
4. Clusters of themes (Colaizzi, 1978) were developed from the combination of similar formulated meanings. Each theme cluster represented and included all the formulated meanings naturally associated with a group of meanings. In

developing cluster of themes, the researcher made efforts to "stay as true to the phenomenon as possible" and to "bracket" his presuppositions about the phenomenon (Hycner, 1985, p. 287).

5. Independent themes were produced from similar theme clusters (see Table 4.3; for more detail on this approach see Sanders, 2003). All the initial manual codes developed earlier were categorised under each theme to measure their frequency and account for variations.

Significant statements	**Formulated meanings**
1.Suzan:	
8. –So you were not very interested in showing or telling people that 'I am using TV for learning'? +No, because they said, I thought that they would say that to watch more TV [laughter], so as an excuse for watching TV not learning. So, this is why I didn't tell them the way I use it, for learning English.	Participant feared people might ridicule her for saying she relied on TV to learn L2 and was an excuse for watching more TV.
17. So even sometimes especially, especially yeah at the beginning of the academic yeah it was actually very exhausting because you know, changing time changing school, it is, but I was yeah, I have this routine for actually yeah for two years, almost two years yeah.	Despite exhausting times, participant kept her L2 learning routines.

Table 4.1: Examples of how raw data were developed into formulated meanings.

6. In parallel to this process of developing the raw data into common patterns and themes, a descriptive account was produced for each participant's narrative reflecting "what" happened (i.e. textual description) and "how" the experience happened (i.e. structural description). Both of these descriptions were combined

in a single composite description reflecting the “essence” of the experience (Creswell, 2007, p. 159). These descriptive texts were used throughout the data analysis mentioned above to better understand the “wholeness” of each participant’s narrative and in drawing interpretive conclusions about their experiences.

7. Although a descriptive phenomenological approach was primarily used especially at the data collection stages—in which the participants were asked to describe and narrate—the final stage of the analysis included elements of interpretive phenomenology. The researcher reflected on the descriptive analysis “trying to make sense of the participants trying to make sense of their world.” This process was mainly guided by these two questions: “What is the person trying to achieve here?” and “Do I have a sense of something going on here that maybe the participants themselves are less aware of?” (Smith & Osborn, 2008, p. 53).

Formulated meanings	Theme clusters	Emergent themes
-Time spent with family was seen as unproductive because nothing useful was achieved (**Suzan. 27**)		
-Participant wished she could continue on her writing despite being physically tired (**Helen. 34**).	**-other life engagements as barriers**	
-Participant ensured she maintained her study routines whatever the circumstances were (**Suzan. 18**).	**-Desire toward engagement despite physical exhaustion.**	
-Participant thought about Japanese learning while engaged in other daily tasks (**Sahar. 9**).	**-no use of self-control**	CONSTANT TENDENCY TO ENGAGEMENT
-Engagement was not seen as extra effort, or forceful self-regulation, but rather a total immersion (**Louise. 3**).	**-engagement as personal time**	
-Participant wished to study without any external pressure (**Kardo. 8**).	**-flow**	
-Occurrences of deep concentration, and immersion (**Sahar. 10**).	**-studying as not homework**	
-Participant felt she was getting better at English just by watching TV and movies at her free times which was not perceived as that much of extra effort (**Suzan. 12**).		
-Learning L2 was seen as fun and not as tiring hard work (**Shirin. 18**).		

Table 4.2: Example of how formulated meanings were developed into theme-clusters and themes.

The entire data analysis was an iterative process and analysis was initiated at the early stages of data collection. In the analysis, the theme clusters and themes were worked through and re-examined numerous times to achieve scrutiny and scientific

rigour (Fereday & Muir-Cochrane, 2008; Finlay, 2012). Therefore, close attention was paid to ensure that the final themes represent what was dominant in the data, so the final presentation describes the bulk of the data rather than deliberately selecting extracts to support specific claims (Joffe, 2004). The analysis was conducted in an inductive (bottom-up) approach allowing the opportunity for reaching data-driven findings. As such, close attention was particularly paid to covering all the areas of the dataset which were thought to be relevant or to contribute to the participants' experiences and thus the phenomenon. In presenting the findings, rather than generating statements that explicitly described a motivational state, attempts were made to develop themes that would best reflect the data and hence explain why the participants experienced what they reported they did throughout their DMCs.

4.6.2 Validity

This thesis utilised a number of strategies to achieve validity. First, during the data collection, participants were given the example of an overweight person going through a regimen for a while in pursuit of losing weight and, instead of being given too much detail on the theoretical components of DMCs, they were asked to describe how they experienced their long-term engagement and what their feelings were like throughout. They were mainly asked to describe and narrate their experiences. As mentioned above, in addition to descriptive accounts as narrated by the participants, the analysis utilised a hermeneutic approach which produced scrutinised interpretations of the experiences rather than relying extensively on the participants' perceived reasons for their experiences. Additionally, in consonance with the phenomenological approach's "validity check" measures (Hycner, 1985, p. 291), once the textual and structural descriptions were produced for each participant's narrative, 4 participants—who were

available—were given written summaries (i.e. vignettes) and some of the emergent themes to check whether they reflected an accurate account of their experiences.

Ali - Summary
A recent graduate social worker working for a small local agency realises that his advanced social skills deserve to be utilised at a better working environment where he could develop and grow. With the help of friends, he prepares a CV in English and applies to international organisations working in his city and eventually receives a job interview. Not expecting to be the case, he would be asked questions in English at the interview, but he cannot answer. This leaves him shocked, embarrassed and speechless. One the way out, one of the local interviewers who knew him before tells him: 'I know you, improve your English to have a better chance'. This situation and the statement incite an urgent and unprecedented sense of need, desire and willingness in him to learn English. He then immediately decides to search for any resources available to achieve this dear goal; he buys and uses all sorts of learning tools, changes his habits from searching in his mother tongue into English on the internet, and starts listening to English programmes on radio and TV, approaching foreigners to communicate with them in English, going to religious establishments other than his own to practice English, and even befriending mostly those people who can help him learn English more. For a period of time, learning English becomes his number one priority and his almost "everything", and family, friends and even his fiancé continuously feels that dramatic change in him and his lifestyle. Meanwhile, he makes constant progress and checks that through people's feedback on his development which induces a feeling of "awarded a big prize" and "pride". He would then exploit every friends meeting to dominate the discussion and talk about his achievement as "a hero who's just come back from an adventure." This period continues almost spontaneously because studying and learning English is never seen as "homework to get down to it at home", but a dominant undertaking occupying his life at work "searching and reading in English", on the road "listening to radio in English" and at home "watching documentaries in English". This engagement only peters out when he attends a job interview at an internarial organisation, but this time communicates confidently in English and gets the job. To him this was "one of the nicest stages" of his life, and after this period, he has not been able to go through the same experience despite his extreme longing for it. He continues to practice some of the habits (e.g. listening to English on radio) but is not experiencing a similar drive any longer.

Table 4.3: Example of a vignette returned to a participant to check its validity.

4.7 Ethical consideration

Following ethical guidelines for conducting research is necessary to protect individuals, communities and environments from harm (Israel & Hay, 2006). While any researcher has to adhere to the ethical considerations, qualitative research bears an extra layer of responsibility due to more potential risks on the participants (Richards & Schwartz, 2002).

Prior to beginning the data collection, an ethics application was made to and approval was obtained from the University of Nottingham's Research Ethics Committee. An interview protocol was used for all the data collection contacts that included a brief introduction to the research, the study objectives and the potential interview questions. All the participants signed (before all the interview sessions) an informed consent form which explained that participation was voluntary—translated copied of the consent forms were provided when needed. The participants were advised that their involvement and their recorded responses were merely used for research purposes.

The issue of confidentiality was taken seriously. Even though sensitive personal topics were avoided as much as possible, all the participants were assured that their identities and any clue referring to or leading to the recognition of their identities would under no circumstances be shared, revealed, or made available to anybody. The participants were also told that they were free in their responses and they were under no obligation to reply to a particular question, or continue until the end. Nicknames were used both in the analysis stage and in the reporting of the findings.

Chapter 5: Salient Facilitative Structure: DMC's Key to Sustained Engagement

5.1 Introduction

The results of the empirical analysis will be presented in this and the next two chapters. As discussed in Chapter 4, although the participants were asked to describe their experiences in detail, the analysis centred on three principal areas of interest: the DMC structure, positive emotionality, and group DMCs. Despite this categorisation, attempts are made so that the empirical results are presented in relation to an exhaustive depiction of what it is like to be in a DMC (as an individual and a group), whether and how motivational intensity and sustainability are experienced, and what motivational processes and properties distinguish a DMC from other phenomena and constructs. Throughout the analysis and the presentation of the findings, a balance has therefore been strived to maintain between presuppositions of what might be significant and patterns emerged from the inductive analysis.

Based on this approach, each chapter starts with a set of research questions influenced and shaped by the analyses process. The results are then presented in the form of themes and subthemes in relation to the broader research questions. Due to limitation of space, the findings are supported by single examples from the dataset. However, attempts are made to provide longer quotes to keep the context. In all the three chapters, the results are further interpreted in relation to the research questions in a separate discussion section, followed by a short conclusion. In presenting the findings, emphasis (underlining) has been added by the researcher, and quotations of the participants (which are reproduced verbatim and essentially uncorrected) are numbered (e.g. Suzan, Q 5.1 etc.) for ease of cross-referencing.

5.1.1 The DMC structure

A DMC can be called the outcome of an ideal match between a personalised goal/vision and a salient facilitative structure (see Chapter 2). While much has been known about the significance of a goal, the main research contribution of the DMC concept is probably the understanding of how a unique structural pathway amplifies the motivational energy of vision and the investigation of the reciprocal relationship between a goal/vision and an accompanying structure in ongoing, process-oriented, and long-term motivational engagement. Raising awareness of this relationship in turn is vital for understanding not only the essence of the DMC construct, but also how L2 teachers can offer their learners an almost complete toolbox they need in order to sustain a steady level of motivated behaviour over the lengthy course of mastering a second or foreign language.

Dörnyei et al. (2016) believe that the notion of the DMC represents a development of the vision construct in that both concepts share the ultimate goal of explaining long-term motivational processes. DMCs, however, are characterised by a number of unique motivational properties that cannot be explained by goal, vision or any other existing motivational model. The most important of these properties are the DMC's unique and robust motivational energy that prevails over a relatively long period of time. Part of what makes DMCs unique then is their structural component: "Not only does their prominent structure provide an accompanying framework which tightly channels the process toward the finish line, but it also plays an active role in keeping the current flowing" (Dörnyei et al., 2016, p. 80). Furthermore, a DMC's structure ensures a steady level of motivational energy without the need for volitional control; that is, engagement in DCM behaviour becomes spontaneous, automatic and

thus effortless, as no self-regulatory measures will be required to sustain engagement (Dörnyei et al., 2014, 2015; Henry et al., 2015).

5.2 Research questions

As discussed in detail in Chapter 2, a major component of the DMC construct is its structure by which the power of an individual's goal or vision is directed "along a tightly structured course to create a prolonged flow of motivational impetus, thereby sustaining the fire of the initial vision-led surge for weeks, months and, in extreme cases, even years" (Dörnyei et al., 2016, p. x). As such, the significance of a DMC structure is in its function to provide direction and a framework for effort and also in ensuring sustainable engagement over the period required to achieve the goal. A salient structure is then a main mechanism by which DMCs become unique experiences in terms of intense but also sustained motivational energy.

This chapter seeks to inquire about a number of principal queries in regard to what the participants utilised as a structure, what the key structural components of their experiences were, and if and how the structures provided pathways for making steady progress towards an L2 goal without the need for constant self-regulation. More specifically, six research questions were formulated from the data analysis:

1. How does a DMC start? How does a DMC come into being?
2. When does one decide on choosing a particular structure?
3. What is used as a DMC structure?
4. What criteria does one consider in adopting a DMC structure?
5. How does a DMC structure help to maintain motivation over a DMC course?

6. How does a DMC end?

The research agenda that informed the data collection and data analysis stages of this chapter was not restricted to the presupposed theoretical assumptions underpinning the DMC construct; that is, despite the fact that the participants were asked questions to describe the structural mechanisms they deployed in their DMC experiences, the interview protocols were left open to any arising questions and areas of interest, and attempts were made to analyse the data thoroughly without omitting significant codes or themes.

5.3 Results

All the participants were initially asked to discuss what mechanisms or plans they used for their learning, and those who were available for a second or third round of interviews were asked further questions about their learning structure. The phenomenological analysis of the responses generated 19 themes reflecting what was dominant in the data. As discussed in detail in Chapter 4, an inductive approach was utilised so the initial coding and analysis were conducted with minimum possible consideration of the earlier theoretical conceptualisations (e.g. Dörnyei et al., 2014, 2015). As a result, these themes represent the most significant aspects in the data in relation to the structural components of the participants' experiences. Below, I present these themes under the six facets/stages of the DMC structure informed by the six research questions.

5.3.1 The DMC launch

In regard to the circumstances prior to and around the time of the DMCs, the analysis identified four major themes and a number of sub-themes.

5.3.1.1 THEME 1: CLEAR STARTING POINT

All the nine participants clearly remembered when their experiences started. They were asked the question (What made your experience start?), and all of them provided an answer not only about the time but also the detailed circumstances before, and around the time, their experiences started. The starting points were described in relation to specific events or occasions. Table 5.1 displays the exact occasions marking each of the participants' starting points.

Participant	When their DMCs started
1. Ali	On the same day when he attended and failed in a job interview
2. Omed	When he was assigned to be the branch manager in his home city
3. Alan	When he went to the German embassy in Syria and was told about the new German proficiency requirement
4. Kardo	When he started his college studies in English and found himself less proficient than his classmates
5. Kawa	The moment he read a piece of writing in English and realized he was able to understand the content
6. Sahar	When she started university and met a number of friends who were interested in Japanese
7. Suzan	The moment she heard her brother and uncle speak in English but refused to translate what they were talking about, and said "who doesn't know, doesn't deserve to know"
8. Shirin	When she received the news of obtaining a study-abroad scholarship
9. Louise	When she realised she could study for a PhD that involved the Old Norse language

Table 5.1: Participants' DMC starting points

5.3.1.2 THEME 2: THE DMC TRIGGER

As well as a clear starting point, all the participants discussed a specific event in reference to what made their experience start. None of the participants' experiences were drifted into being from a sudden decision, but were—or perceived by the participants to be—caused by a particular incident or as a consequence of a specific triggering stimulus. These triggers were one or more of the following:

5.3.1.2.1 Emergent opportunity

Four participants referred to a newly-arising opportunity which played the main role in setting up their DMC experiences. Shortly after graduation from university, Omed, for

example, was appointed as a new branch manager for which he needed to develop his communication skills in the L2. To him, this was a valuable opportunity after he had secured and successfully completed a competitive internship. Shirin's DMC was triggered when she became aware and obtained a fully-funded scholarship to an English-speaking country. To her, this was a sudden and hard-to-believe opportunity so she could improve her English skills because she had held the belief that she was unable to achieve this dream in her own country:

> Learning and improving English was my biggest objective, even *more important that obtaining the MSc… It was a dream come* true, because earlier I would see studying in the UK as almost impossible due to difficulty in obtaining a visa, high tuition fees, travelling and other factors. However, this opportunity suddenly became available. (Shirin, Q 5.1)

5.3.1.2.2 Sense of frustration/failure

Two of the DMC cases were triggered by negative emotionality stemming from a failure or a negative statement. Ali's DMC was triggered immediately after he attended a job interview in which he was unable to answer the questions in English. As a result, Ali came out from the interview "shocked" and humiliated, feelings that made him realise his poor L2 skills and the need for improvement and positive change, as he recalls:

> Ali: *… After hello, they started speaking in English, which I* never thought would be the case. I was getting dizzy as they were speaking. I used my broken English and said a few words *like, 'wait, I am not good', I can do it in Kurdish only… They* looked at each other, apparently saying it was not possible, and I got it.
> Interviewer: So the interview ended?
> Ali: *It ended right there… I still remember this very well, and* think it happened yesterday. I came out from the building, *shocked, and couldn't even focus on what the person at the*

> reception, whom I knew, said to me. I was in a weird situation…. (Ali, Q 5.1)

The effect of this event was dramatic. He further recalls his reactions and thoughts immediately after the failed interview and while in his car going home:

> *The impact was huge… When I put my hands on the steering wheel, I said to myself, 'Ali, you have to move just like this car', and 'you can't stop where you are'… This is different than before; I was not really into English before and I didn't care* much about it. So this was my turning point. (Ali, Q 5.2)

As can be concluded, Ali was most affected by his affective reactions to his inability to use the L2 and what interviewers told him rather than the event itself. In that respect, the failed interview served as an opportunity for him to reflect and realise his inadequacy.

Suzan's experience was also triggered by a negative emotional reaction to a statement by her brother and uncle. Although she was younger in age (a teenager at the time), she found their statement about her L2 understanding skills to be humiliating and demeaning, which aroused a sense of anger:

> We were a family group, where my uncles and my brother speak in English so no one can understand them. I asked them to *translate, and they said 'the one who doesn't understand, he doesn't deserve to know what we are talking about'…* I became very angry and I had to do something about it. (Suzan, Q 5.1)

5.3.1.2.3 Sense of awakening

In addition to experiencing negative emotionality, both Ali and Suzan also experienced a sense of realisation and awakening. They both discussed their feelings after the events and also the statements made about their inadequacy. In turn, they thought about and considered the directions they needed to take and the consequences of not taking action.

When Ali was unable to proceed with the job interview in English, he was asked to leave, and despite the feeling of failure, the event made him contemplate why this happened and what went wrong:

> I remember it very well, he [Ahmed, one of the interviewers] put *his hand over my shoulder, and said to me, 'I know you, and* that you have good experience and skills. Improve your English *to have more opportunities'... I went into my ca*r and waited, *thinking of Ahmed's speech... Ali, you can't go any further if you don't improve your English. I realised I would remain in the* same circle without English…. (Ali, Q 5.3)

A similar trigger was identified with Kardo when he realised he was less proficient in English than his classmates upon being admitted to a university that instructed in English:

> I got accepted anyway [to the university]. I was feeling very shy and nervous during my class times. I saw most of the students speaking in English, I figured out, later, is very weak English, but for me it was native English. (Kardo, Q 5.1)

Kardo felt insecure in his new environment mainly because of the perception that his classmates were proficient English speakers. Given that this event occurred at the early days of his four-year-long university life, Kardo felt a sense of awakening about his L2 status and a strong need for improving his English. Later, Kardo discussed how he mainly focused on developing his speaking abilities, among other skills, as his intense experience was triggered by becoming conscious of his lack of communication skills in the L2.

5.3.1.2.4 New information

One participant's DMC was in large part triggered by receiving a piece of information which made him enrol in an L2 learning course. Upon his marriage to his German wife who was visiting Kurdistan where Alan was from, Alan later went to Syria to apply for a visa to join his wife. He was however advised of a new regulation "that required sponsorship applicants to know German before granting them a visa." Although unexpected and even "shocking", it did not take long for Alan to make a resolution to stay in Syria and study towards a German A-Level certificate required for the visa.

5.3.1.2.5 Meeting friends who shared passion

Although Sahar had long had an interest in learning Japanese so she could understand Japanese anime as she was not satisfied with the dubbed versions, her intense learning experience was only triggered when she entered the university and met a few friends who shared a similar passion for Japanese culture and movies:

> So I met a few people who were really interested in Japanese animation and movies, drama and everything that was to do with Japan. So because of my friends, then I was kind of drawn into it as well. And we started making our own group. We took on Japanese names; we started trying to learn the language; we watched Japanese films together, watched Japanese animations together…. (Sahar, Q 5.1)

As a native of Saudi Arabia where making contact with Japanese speakers was almost impossible, Sahar found the environment in which she met people with whom she used Japanese which now seemed to be a living language. The above extract also suggests that the generation of Sahar's DMC had a social component in that Sahar and her friends formed a friendship circle centred on learning and using Japanese insofar as they adopted Japanese names and engaged in learning activities together.

5.3.1.3 THEME 3: DMC CONDITIONS

Despite that all the DMC cases were triggered by specific events and triggering stimuli, the analysis identified a number of conditions that seemed to be necessary prior to the DMCs in order for the above-mentioned triggers to be effective. Below I discuss these conditions and the interplay between the DMC conditions and triggers.

5.3.1.3.1 Goals/ambitions

Prior to their DMCs, all the participants had some kind of goals or future wishes they hoped to reach, related to their potential DMCs and which had important implications for making them prepared for their DMCs. Although many of them had a pre-interest in learning/improving their DMC-L2s, the pre-DMC goals were mainly ambitions for personal and developmental growth—rather than learning an L2 in its own right. As such, these gaols were mostly general dreams and desires for a better future state such as being successful at one's career or being able to do something in life which one always wanted to. Table 5.2 illustrates the participants' goals/ambitions prior to their DMCs. As seen, these goals were not in regard to acquiring a certain level of L2 proficiency for its own sake; most of the participants wished to achieve goals for which learning an L2 was perceived as necessary.

All the participants had goals that not only did they consider valuable and significant, but their attainment seemed to have great influence on their personal lives. However, despite the fact that all the participants had a goal-oriented background, simply having a goal did not lead any of them to experience a DMC or a DMC-like motivational surge. That only happened once a triggering stimulus became available which set up their DMCs. Evidence backing the claim that goals did not lead to

motivated behaviour is apparent from all the DMC cases in which the participants had had the general goals for a relatively long period before their DMCs started.

Participant	Pre-trigger goal
1. Ali	to work at environment with more opportunities for personal growth
2. Omed	to gain employment at international organisations
3. Alan	to gain sponsorship visa and immigrate to Germany to live with his wife
4. Kardo	to be successful in studying at an English-taught university
5. Kawa	to prove to oneself and others of his skills
6. Sahar	to fulfil personal desire in knowing about Japanese culture
7. Suzan	to prove her skills to family members
8. Shirin	to gain working level skills in L2 needed for career purposes
9. Louise	to be able to choose different career path studying old Scandinavian literature

Table 5.2: Participants' pre-trigger goals/ambitions

However, when the participants encountered a triggering stimulus, their goals changed from general to specific, from non-L2 to L2-related, and from abstract to tangible (see Table 5.3). This shift seemed to be necessary so they could direct their energy toward a clearly defined end point. Furthermore, having a specific goal helped some of the participants to form a sensory re-construction of their goals, i.e. changing a goal into vision.

Participant	Post-trigger goal
1. Ali	to pass a job interview in English with an international organisation successfully
2. Omed	to improve L2 comprehension skills to perform work correspondence tasks
3. Alan	to reach an L2 proficiency required to pass sponsorship visa test
4. Kardo	to prove to university tutors of his L2 skills
5. Kawa	to reach a certain level of L2 speaking and understanding
6. Sahar	to be able to understand media in L2
7. Suzan	to understand spoken conversation in L2
8. Shirin	to pass L2 test required to study MA in L2 and gain academic-level L2 proficiency
9. Louise	to be able to read and understand old written texts in L2

Table 5.3: Participants' DMC goals

5.3.1.3.2 Perceived control/feasibility

The second condition that was identified in the analysis was the perception that one had the capacity to participate in and complete all the activities leading to the accomplishment of the DMC goal, and that the challenge posed by the goal was reasonably compatible with one's perceived abilities. This condition was pinpointed when a few participants discussed their pre-DMC disbelief they held about the goal feasibility. Shirin for example had previously wanted and made attempts to improve her English skills, but had not been successful, mainly because she had the perception that her home country was not an appropriate environment for learning:

> In fact, I for long wanted to improve my language skills, but was *unable to do so…* Previously, even though I wanted to learn *English, I didn't know how or didn't believe that making an* effort on my own would be useful. (Shirin, Q 5.2)

Therefore, a main objective behind applying for a government scholarship to study abroad was to find the mechanism through which she could improve her English skills: "When I applied to this scholarship, it was very important to me to go to an English-speaking country especially the UK*…."* (Shirin, Q 5.3)

In addition to ensuring that one believed in one's own abilities to engage in and successfully overcome the challenges of the goal, the analysis also identified the need for the perception that the tasks leading to goal attainment were reasonably accomplishable. For example, although he previously felt the significance of learning English, Kawa was avoiding it mainly because of his perceived fears in the language. However, once he realised English was not "too difficult" or "*that complicated"*, his two year old DMC started and a random event leading to this realisation functioned as a triggering stimulus:

> *… So, what happened was I came across some written material* in English, a story, and once I read a bit of it, I realised it was not too difficult to me or that complicated. I felt I was not too *bad at it….* (Kawa, Q 5.1)

In both of the cases mentioned above, the lack of confidence in one's own abilities and perception of goal/task feasibility were overcome only when a strong triggering stimulus became available. As such, the pre-existing fear and reluctance immediately disappeared as the triggers functioned to alter the perception of inability.

Despite that a sense of control was only acquired after a DMC trigger, the data suggested that the pre-DMC fear and sense of inability were largely perceived—and not

real. Although Shirin had previously held the belief of inappropriateness of her home-country environment, she indeed started her intense learning while still in Kurdistan—that is, before making the trip to the UK. Similarly, the story that changed Kawa's perception and triggered his DMC was written in a simple-enough language for him to understand; this indicates that he was previously unfamiliar with the degrees of the L2 difficulty to make an informed assessment of both his ability and the challenge of the L2.

It is important to mention that none of the participants, including those who suddenly acquired a sense of control/feasibility, perceived the DMC goal/tasks to be too easy, but reasonably challenging. For example, when Alan was advised of the new German proficiency requirement, he found it "shocking" and even "sad news", and as a native and resident of Iraqi Kurdistan, he was not initially ready for this and had second thoughts about taking a preparatory course in Syria. However, when he gained the confidence that achieving the required L2 score was "difficult but feasible", he decided to stay in Syria and thus his intense experience started, although he still had doubts if he was up to the challenge:

> At the beginning, I found it difficult and challenging. However, for any goal, if you know the duration and when it ends, it would be easier and you try harder for it... *When we first started, it* was very difficult because the language was entirely new to me. But *the teachers' method of explain*ing was rather comforting. (Alan, Q 5.1)

A closer look at this excerpt reveals that even when Alan was enrolled in the course, he still did not see a balance between his capacities and the new language. Yet, the perception that the duration required to study German and pass a proficiency test is only

a few months and the comfort provided by his teacher's method created a sense of feasibility.

5.3.2 Developing a DMC structure

Once a DMC has started, one is believed to develop a salient structure that plays a central role in keeping the initial motivational momentum going through the various stages of the path to goal attainment (Dörnyei et al., 2015). Learning about when individuals make a decision about their structure and what they use as a structure is important not only for understanding the early stages of a DMC, but also how a DMC might be engineered. Thus, the questions that guided this section were in regard to two issues: First, when does one decide on a DMC structure? Does a DMC launch automatically generate a structural pathway? Is it around the time of the DMC launch that a DMC structure is being produced and finalised or does the development of that structure involve a relatively longer period to be established? These questions are answered through Theme 4 and 5 below.

Second, as each of the participants used a different structural pathway to achieve their DMC goal, a significant line of inquiry was around how one decided on one form of structure versus another. More specifically, what did the participants use as their DMC structure? Themes 6, 7 and 8 address these questions.

5.3.2.1 THEME 4: URGE TO DEVELOP A DMC STRUCTURE

In all the DMC cases, once the DMC launch had occurred, the participant felt an urge to find a matching structure so their passion would be translated into motivated behaviour. As discussed in the previous section on the DMC launch, when Ali attended and failed

in a job interview, his image of himself with an improved level of the L2 provided an almost immediate urge in him to find a matching structure:

> *... I said to myself, 'Ali, you have to move just like this car'*, and *'you can't stop where you are'. My whole mind* was occupied with what I should do, and how I should do it. (Ali, Q 5.4)

As is clear from his account, two things happened almost spontaneously: he developed a clear goal/vision, and thought hard about how to fulfil this vision through the available resources. Therefore, whereas the launch did not automatically include a set of plans and mechanisms for action, it created a powerful urge in him to embark on a plan of action.

5.3.2.2 THEME 5: NO TRIAL-AND-ERROR STRATEGY

For 8 of the 9 participants, a decision on the structural choice was made almost immediately after their DMCs started (i.e. after the launch). None (except for one case which I will discuss below) of the participants seemed to be searching extensively for the best possible structure or method of learning. For a number of them, they already had an existing structure which they embraced immediately. For others who used a new structure, they seemed to have taken advantage of what was available in the immediate surrounding, rather than searching for a best possible plan.

Louise used vocabulary flashcards right from the beginning until the end of her DMC period, mainly because she was well familiar with the use of flashcards before:

> So I carried those small pieces of paper everywhere with words, because I saw that vocabulary is very important when you are trying to learn a language very quickly [and] because flashcards were always part of my life. (Louise, Q 5.1)

Thus, she used the vocabulary flashcards due to the availability and her familiarity with the use of flashcards. Furthermore, she held the belief that using these flashcards were an effective tool to learn a second language's vocabulary.

Not only did the participants make a structural choice soon after their DMCs were launched, but they also opted out of the process of searching for a best possible method. After Omed's DMC started, he immediately decided to use English stories because they were easily available to him. Yet, he did not spend time looking for a "scientific" method or taking an English course from an accredited institution:

> *I probably didn't have a concrete scientific plan to say 'I need* to finish this beginner course in that period, and then to *intermediate and so on'... I didn't know anything about* standard scientific methods. So I started with purchasing English books, readi*ng English articles….* (Omed, Q 5.1)

Not only did Omed not know about "standard scientific methods", he did not make any attempts to learn about them either. Rather, as he wanted to rely on himself, he took the initiative on his own and developed a structure.

The one participant who reported conducting some initial research to find a best method for his learning was Kardo; however, even his case does not imply a deviation from the dominant theme of "no trial and error strategy". First, Kardo's DMC started when he began his post-secondary studies at a university that instructed in English, and he found himself of less ability than his classmates. However, there was another additional element to this:

> *... In one of her* [a lecturer's] classes, I put an idea forward upon the most powerful method to learn English. We argued in class very much, but apparently we disagreed both in each ideas... She believed that grammar is a prerequisite for Learning! But I, however, completely disagreed with her. I

> *believe that English is just like a soccer game… He* [the learner] has to do something instantly.… (Kardo, Q 5.2)

As he started an apparently heated argument with his tutor about the "most powerful method to learn English", he naturally experienced a sense of stimulation and pressure to prove himself right. For that reason, he started searching for that method he considered to be the best:

> [T]hey thought that I am just a beginner and how can beginner-*student shows the influential method to learn English! … I* surfed on internet very much until I found a guy called A.J. Hoge (effortlessenglish.com*)* … I said yeassss now I found it with all of heart. (Kardo, Q 5.3)

Secondly, even though he seemed to have believed that what he had found was the best method, his DMC structure did not completely rely on that method. Rather, he spent most of his time reading and writing in addition to listening to podcasts which did not seem to be part of the A. J. Hoge's method (mentioned in the quote above). Therefore, in Kardo's case, it seemed clear that the main reason for searching for a best method was to challenge his English instructor, rather than to empower his own DMC, and, once he endorsed this method, he only used it to support his personal DMC structure.

5.3.2.3 THEME 6: BECOMING CONSCIOUS OF AND USING EXISTING RESOURCES

The data suggested that once the participants had a clear sense of where they wanted to reach, they initially explored resources immediately accessible to them. In many cases, these resources were already available to them but, as they mentioned, either they did

not clearly know if they had existed or they did not have confidence in their effectiveness.

When Omed was appointed as a branch manager, he now had a clear vision of the L2 proficiency he wanted to achieve and this pushed him to make use of the available resources:

> *… So I started with purchasing English books, reading English* articles. There were a few English newspapers available at the market at the time. So I wanted to try different texts, to understand them and then translate them. (Omed, Q 5.2)

As such, he mainly relied on newspaper articles and short story texts because he was able to easily find them. Instead of taking English courses or consulting an L2 professional, he made the decision to use English texts which suited his L2 goal well (being able to understand texts written in English).

Similarly, after the DMC launch, Ali became conscious of the resources that he did not know they had previously existed:

> [I]*n my local organisation, we had some foreign partners…* Before that interview event, I was hiding from those foreigners *and never wanted to speak with them… So the first step was to get benefit the resources available to me which I didn't feel they* existed before. (Ali, Q 5.5)

Hence, Ali's first step was to make a behavioural change after a shift in perception about the need for approaching foreigners, who were now seen as a valuable resource for learning English. Here, the shift in the motivational avoidance to motivational approach is clearly evidenced in his experience.

5.3.2.4 THEME 7: ADOPTING NEW RESOURCES

Six of the participants used new sets of resources as the main part of their DMC structure—by new, I refer to mechanisms, plans and methods which were not already available to the participants and those they had not used before, whether for learning or other purposes. These new resources were then adopted and incorporated into their lifestyle in order to achieve the DMC goal.

Kardo, for example, used a variety of new resources such as listening to English broadcasts, reading novels and articles, and practising writing in English, which were all new practices he adopted after his DMC had started. Kawa also relied on reading stories and practising the new vocabulary in them, something he had never done before. For Alan, however, even though he used an entirely newly-adopted structural pathway, he exploited the unique structural circumstances that suddenly became available to him. He went to the German embassy in Syria to apply for a marriage-sponsorship visa but was advised of a newly-applied rule of German proficiency. Even though he never expected to be asked for such a language requirement, he immediately decided to turn the challenge into a golden opportunity and create an effective structure from the new circumstances: He enrolled in a German course and studied in his hotel room.

5.3.2.5 THEME 8: INSTITUTIONALISED STRUCTURE AS SECONDARY

Some of the participants reported taking a language course or enrolment in an academic institution as either their main DMC structure or as support to their personal structure. This kind of structural utilisation was, in the process of analysis, called institutionalised structure because the individual, intentionally or otherwise, usually had little control over the details of the structure. The analysis focused on patterns of relationships between being involved in an institution and the DMC experience.

4 of the 9 participants used or were involved—in one form or another—in enrolment in an institution during their DMCs. Regardless of when their institutionalised engagement began, the entire data collected from the 4 cases suggested that formal enrolment had no effect on generating a DMC; that is, all the DMCs were triggered mainly by an event, and based on a personal goal/vision, rather than by triggers coming from an institution targeting their motivation. Moreover, although some of them utilised what institutions offered to them, such as benefiting from the school's English subject (e.g. Suzan), none of the participants seemed to rely exclusively on the structure provided by an L2 learning or academic institution.

When Alan was advised of the availability of a language centre which seemed to provide free German courses, he almost immediately joined the course. Although he attributed a great deal of his outstanding result to the course he took, his holistic account of the entire experience provided further insight into the efficacy of his personalised structure. First, the German course seemed to be grammar-focused as he described and had the objective of preparing visa applicants for a formal test. However, even though he passed the German test within the specified period, his achievement was mainly in communicative skills terms as he was later praised—while settled in Germany—for his understanding/speaking skills. Secondly, while in Syria, he would only spend four hours a day at the language centre. Other times, he was studying in his hotel room and chatting on the Internet with his wife in German:

> Alan: Other than the course, I had some German learning books that I had taken with me and was studying them there. I was using TV, and would sometime go to internet cafes and chatted with my wife. *She was helping me with the language…*
> Interviewer: And what else other than TV and chatting?

> Alan: I would sometimes go to the embassy and bore them. I would go in there and used whatever words I had learned with them. (Alan, Q 5.2)

As such, he also relied on a few German learning books, German TV, and even going to the German embassy. Also, besides studying in his hotel room, he was taking study notes when going out, making his learning times to be more than twelve hours a day:

> Interviewer: How many hours did you devote to learning German?
>
> Alan: Including everything, I think I would dedicate up to twelve hours every day, maybe more. The course hours were from 9 to 1. Then I would study while in the hotel. (Alan, Q 5.3)

Taken all these structural components together, it seems that Alan exploited the time he spent in Syria well in the service of learning German. His structure included a number of components and the institutional enrolment was only one component—perhaps a supplementary one. Therefore, it is clear that Alan used the institutionalised structure as part, and in support of his personally-adopted DMC structure.

5.3.3 Criteria used in selecting a DMC structure

After identifying when the participants adopted their DMC structure and what they made use of, it is necessary to understand what criteria they used for their structural choice. Thus, the question guiding this section of analysis was: What makes an individual experiencing a DMC decide on a kind of structure irrespective of the availability or the lack of necessary resources?

The data of all the DMC cases suggested that the selection of a DMC structure was primarily made based on two main criteria: the structure needed to be personally-appropriate and goal-appropriate. However, before discussing these two criteria, a

dominant pattern emerged that seemed to explain what influenced the participants' choices most.

5.3.3.1 THEME 9: REJECTING OTHERS' ADVICE

A number of participants spoke about instances in which they deliberately rejected others' advice on how to proceed about or what to use for their learning. Ali for example did not accept a friend's suggestion to install a dictionary application on his phone:

> *... I insisted very much not to install a dictionary on my phone…* a friend who is now in Australia told me to purchase that *dictionary, but I rejected… because* I wanted to depend on myself. So I would not be depending on a dictionary for anything *I didn't know*. (Ali, Q 5.6)

It seems that Ali's friend who suggested the idea of a phone dictionary had been ahead of him in terms of language skills and was therefore in the position to recommend methods that had worked for him or her. However, Ali did not accept the idea, not because he saw little use in that method, but because he wanted to rely on himself.

Similarly, when Omed was offered a managerial position at his organisation which required him to develop his English skills, he did not bother with taking an English learning course because he wanted to rely on himself: "*I didn't want to take* English courses, but wanted to rely on myself. So I began with purchasing stories." (Omed, Q 5.3)

The participants felt confident in making a decision about their structural choice, and this was a dominant theme also for the participants who were engaged in learning through institutions which mostly offered standard structural requirements or recommendations. Kardo, for example, was unable to make sense of the number of

hours set as standard for reading in the L2: "That period, there was a day that I was reading 10-13 hour whereas we were told from our instructors that the reading hour is 7 hour per week which was thoroughly meaningless to me." (Kardo, Q 5.4) Thus, not only did he reject his instructors' advice, but he also found their recommendation meaningless.

5.3.3.2 THEME 10: PERSONALLY APPROPRIATE

The data analysis identified that the most dominant underlying factor for all the participants was whether or not one kind of structure suited their personal circumstances. I have previously discussed how the participants made use of existing resources; yet, the individuals did not seem to utilise all the resources immediately available to them. Similarly, when they reached out to new resources, they were rather selective in their choices.

The major reason that Suzan relied on watching TV for improving her understanding skills in English was that she always liked movies. As she was previously watching English TV on a daily basis, she did not see relying on TV as a big change to her personal circumstances:

> Suzan: Actually I was watching TV since I was, English programs, since I was, maybe ten years old... *I was using,* I was watching TV aimless, without any, pointless, I just, to make the *time, yeah... to pass time only,* but then when I use it for learning, I was focused, more focused, especially because I read the subtitle, so when the conversation, actually they repeated the, some TV shows, so I watched the second ermmm
> Interviewer: Episode?
> Suzan: Yeah. (Suzan, Q 5.2)

As such, watching TV in English had been an established part of her lifestyle long before her DMC experience. Therefore, despite making changes in the way she

watched TV during her DMC period to direct it towards her learning goal, using TV as her DMC structure was not seen as incorporating a new and burdensome commitment to her life. She also explained that watching TV was mainly specified to times when she had finished her daily tasks and had free times: "*It was my free time*... So the two hours for movie in the evening was my special time, relaxing time." (Suzan, Q 5.3)

The issue that some of the participants only used free time to study for their DMC goal was one factor in making the DMC structure more personally befitting. Some other participants discussed this appropriateness in terms of incorporating their DMC engagement successfully into their daily schedule. For Kawa, for example, studying late at night was an effective structural element that worked well with his busy schedule:

> *... I had a special schedule which was the main thing... So, I* would usually get home at around 8 or 9 and after dinner and spending time with family and watching some TV, I would go to my room and get down to my study or my time... My family were all asleep and there were no attractions. (Kawa, Q 5.2)

5.3.3.3 THEME 11: GOAL-APPROPRIATE

The second important determinant of selecting a certain type of DMC structure was ensuring that the structure suited the participant's DMC goal. As discussed earlier, whereas the participants did not seem to undertake extensive research to select a specific kind of structure, their selection of structure was nevertheless never random. If we go back to Suzan's story, her reliance on TV shows was not merely because of the availability and suitability of that structure, but perhaps more importantly, because it was probably the best available choice to serve her DMC goal—being able to understand spoken English. Louise's use of vocabulary flashcards was also in part due to their aptness to achieve her DMC goal in addition to their carryout suitability:

> ... *I* saw that vocabulary is very important when you are trying to learn a language very quickly. And even when I was at a party like with my friends or going somewhere, I was just looking at those flashcards all the time. (Louise, Q 5.2)

It is worth noting here that Louise was learning Old Norse which is no longer spoken, and as such, when she is referring to "a language", it is probably her belief on learning that particular language. As such, her belief on what was best to learn a language reflected her assumption about the best way to achieve her DMC goal.

5.3.4 DMC structure and maintaining motivation

So far, the focus has been on the initial stages of a DMC occurrence, that is, the DMC launch and the immediate decisions the participants made following the launch. In the sections below, I will present the analysis that covers the subsequent stages of a DMC process. If by now we understand how a DMC starts and why one uses one type of structure versus other types, it is time, and perhaps more important, to investigate how individuals experiencing a DMC manage to maintain their heightened motivation and motivated behaviour for an extended period of time. Five themes were finalised in this regard.

5.3.4.1 THEME 12: DEVELOPING BEHAVIOURAL ROUTINES

Even though most of the participants were not directly asked whether they had developed learning routines while in their DMCs, many of them discussed the issue at some point in their narratives, especially in the context of their DMC structure. By going through the dataset for codes related to routines in the participants' experiences, it was found that the majority of them did develop routines related to their DMCs. Despite

identifying behavioural routines as a dominant theme in the data, the analysis found variations in what was considered as routines, how they were developed, and how they were carried out.

When the participants were asked about the structure or method they used for their learning, they all mentioned a set of activities they engaged in on a regular basis. That is, instead of doing anything and anytime to improve their language, they rather relied on an almost systematic set of recurring learning behaviour.

In Suzan's experience for example, the presence of learning routines was very clear. However, whereas she relied mainly on the routine of watching TV shows for her learning, other types of learning engagement did not become established routines:

> Interviewer: *So let's talk about the structure. You used TV,* movies and what else did you use?
> Suzan: Newspaper, but not much, because maybe even in three or four months, I can find one issue, but basically TV. I sometimes asked my teacher if I pronounce the words that I *don't know the exact meaning in Arabic…*
> Interviewer: Did you buy dictionaries and books?
> Suzan: Yeah we have them, but as I said, my major problem is spelling. So even if I try to search for a specific word, I was not lucky in finding the exact meaning. (Suzan, Q 5.4)

Suzan had the routine of watching a TV show for fifteen minutes and then a movie every night. However, as seen in the extract, she never developed routines with other resources she sometimes used such as newspapers and dictionaries. For newspapers, she was unable to obtain them frequently and this lack of availability was the factor we know that prohibited reading newspapers from becoming a routine. As for dictionaries, even though they were available to her, she did not find them particularly useful.

The participants were selective in what types of resources and learning behaviours they adopted and practiced on a regular basis. In doing so, they chose the

learning behaviours that both helped them to reach their DMC goal and also suited their schedules and lifestyles. I already mentioned Kawa's story whose work/school schedule was crucial in enabling the establishment/execution of his study routines, as he narrates:

> ... It was a daily thing and I would not be happy going to bed without studying. Sometimes, I would fall asleep while studying... If I was extremely tired or had to go out with friends, I would not study or study very little. *But I didn't* feel good on those days. (Kawa, Q 5.3)

He clearly had study routines that he would engage in on a daily basis. His routines were developed in accordance with his busy daily schedule; however, his busy lifestyle did not pose a major risk on his routine engagement. Thus, on the one hand, he managed to use the busy schedule in the service of his learning as he saw the late evening study "a good time" because his "family were all asleep and there were no attractions". On the other hand, feeling "good" about engagement played an underlying role in keeping his routines unchanged in the face of attractions. When he was "extremely tired or had to go out with friends", he would then not engage in his daily routines, but in return felt unhappy about it. Therefore, it seemed that satisfaction derived from engagement would intervene whenever there was a competing, mostly external, distractor to the DMC routines.

Despite developing established DMC routines, the participants did report facing difficulties in maintaining continual engagement in their routines and therefore they sometimes had to safeguard them. Suzan, for example, in a number of circumstances, reported her dedication and commitment to maintaining her TV routine engagement, and at times she made all the effort to fight any interruptions to her routine:

> I stuck to that routine, so I have to watch it whatever the circumstance was, even sometimes like bring my homework in

> *front of the TV so my father and mom don't say anything because I am studying, but I don't, actually I am watching the* TV. (Suzan, Q 5.5)

This suggests that Suzan found engagement in her learning routines to be so rewarding insomuch as she was doing everything in her power to avoid external interruptions. Thus, engagement was a personally preferred choice.

A significant advantage of developing DMC routines seemed to be related to empowering long-term motivation. I discussed above how Suzan made all the attempt to maintain engagement in her TV routines even when the external pressure was high. This seemed to be true at times when engagement in these routines was too exhausting for her:

> Actually sometimes I just fall asleep before the beginning of the movie but still waiting, but because I just want to learn this conversation, maybe I need it someday. I thought it is important, so yeah, it was exhausting. (Suzan, Q 5.6)

In the excerpt above, Suzan mentions the difficulties that she faced. Yet, the exhaustion she reports did not pose an actual risk to cause any interruption in her routines. At those times, it seems that, her driving force to continue watching the movies and fight sleepiness and tiredness was not the enjoyment from the engagement itself; rather, it was the fact that watching TV was now an established routine in her life. As a result, skipping those routines was interpreted as not making progress towards her goal. She therefore continued her engagement because she felt she would "need it someday" as "it was important" for her goal. Therefore, it seemed that developing established DMC routines was vital for keeping the motivational tendency intact, even at times when the going was tough.

5.3.4.2 THEME 13: ESTABLISHING BEHAVIOURAL ROUTINES

There existed variation in regard to when (at what stage into their DMCs) the participants felt they had turned their learning activities into habitual routines. However, the variation was mainly due to whether an individual had made use of existing or new resources as discussed in an earlier section. First, the participants who relied on existing resources as their salient DMC structure seemed to be capable of developing and establishing learning routines relatively soon after their DMCs had started. Suzan for example seemed to have had the advantage of having the TV watching an established routine long before her DMC. Although it was previously never a learning routine, the fact that she had used to be watching TV in the L2 was helpful in making an almost straightforward transition.

The data also suggested that a number of participants made changes to some pre-DMC personal habits in the service of the DMC experience. Ali, for example, discussed how he changed his habit of searching for material at work from doing it in Arabic into English after his DMC has started:

> At work, as I said, if I needed to search on a topic, I would not do in Arabic… I would go to an English one, even though I knew it was taking me more time, and more effort, but I would do it anyways. (Ali, Q 5.7)

There is a clear indication here that as a result of this change in habits, Ali accepted the extra effort associated with the modifications. Suzan also accepted to stay awake late to watch the TV episodes for a second time.

As for the other participants who did not rely primarily on existing resources or pre-established routines, they tended to develop their new learning routines a while after and into their DMC experiences. When Sahar's DMC started as a result of meeting a group of classmates who were interested to learn Japanese, they together developed

weekly meeting routine to discuss their passion for Japanese and share their experiences. However, this took them a few months to become an established routine:

> Interviewer: Were these routines developed from beginning or throughout the experience?
> Sahar: Later I think, because at first it was just random phrases picked up from anime, and not a fixed time just whenever we chatted…. (Sahar, Q 5.2)

As such, whereas the participants who utilised pre-existing routines as part of their DMC structure picked up those routines almost immediately, the process of routine establishment for the other participants took a relatively long period of time to become an integrated part of their lifestyle.

5.3.4.3 THEME 14: INTENSE MENTAL/AFFECTIVE PREOCCUPATION

Despite the emergence of behavioural routines as a dominant theme, the data revealed that engagement—or thinking about the DMC—was not always restricted to specific times. The analysis also identified that, for most of the participants, learning did not depend on a single activity such as reading in the L2. Table 5.4 illustrates that the participants made use of a combination of learning resources—although some of them utilised a main studying method. The participants also varied in how much time they devoted to the L2 learning on a daily basis.

Participant	Main learning method (DMC structure)	How much time spent daily on learning
1. Ali	used radio and TV programmes, read L2 materials, spoke to foreigners in L2, attended learning sessions	around 3-6 hrs
2. Omed	read and translated L2 stories & newspapers, used email correspondence in L2	around 4-6 hrs
3. Alan	attended L2 preparatory course, studied and read L2 textbooks, watched TV in L2	close to 10 hrs
4. Kardo	read, watched and listened to L2 material, attended university course in L2, spoke to people in L2	over 10 hrs
5. Kawa	studied stories and other material in L2	2-3 hrs
6. Sahar	watched L2 anime and other L2 materials, studied with a group of friends	1-3 hrs
7. Suzan	watched TV shows and movies in L2	around 3-4 hrs
8. Shirin	studied at an L2 learning centre, read papers and watched TV in L2	about 6-8 hrs
9. Louise	used vocabulary flashcards and read poetry in L2	1-5 hrs

Table 5.4: Participants' structure and daily time spent on learning

As can be noticed from Table 5.4, while a number of participants did spend a relatively high number of hours on their learning, for at least some of them the number was low (e.g. 1 hour), and for a number of participants the average was around 2 to 3 hours a day. Nevertheless, a more holist analysis of the dataset indicated that the number of hours spent on learning might have had little relevance to the motivational intensity of the DMCs.

An example on the extreme side of this table was Kardo who, on some days, spent 13 hours studying English and reported his daily engagement in L2 learning as follows:

> *... Describing my routine in this two years, it would* be speaking in English, dreaming in English, eating in English, reading in *English, watching English televisions… all those are a great* part of my life that time. (Kardo, Q 5.5)

It is clear that learning had become a considerably major, if not the most significant, part of his daily occupation. However, it is important to note that this preoccupation was not always restricted to studying the L2, but also and perhaps more importantly a mental/affective obsession:

> Honestly, I was listening to English podcasts 5-*8 hours a day…* Beside this, I was reading interesting novels, articles, surfing on YouTube watching motivational and inspirational videos made me on cloud 9 and I was enjoying every second of my life that time. (Kardo, Q 5.6)

Apparently, watching "motivational and inspirational videos" on the Internet was not aimed at learning any aspects of the target language. Rather, it signifies his mental and emotional involvement in his DMC and an expression of his excitement—as also reflected in his feeling of enjoyment in his "every second" of his life.

Kardo's experience was a typical example of a DMC displaying intensity of cognitive, physical and emotional engagement. Engagement in DMC behaviour had become the norm and exceeded his and others' expectations.

As for the participants who did not spend as much time on learning, their experiences were still recognised for being intense, overwhelming and obsessive. First, it is necessary to point out that the participants who spent less time on learning were

virtually too busy to devote more time to studying. Louise, for example, whose DMC occurred in a single summer, was meanwhile busy with a number of other responsibilities, and was only able to engage in the L2 learning in her free times:

> Well I had to do a lot of other things. First of all I had to graduate from my home university and finish my dissertation... But I used my free time for that, so whenever I was alone in my room…. (Louise, Q 5.3)

Despite the relatively little amount of time she devoted to learning, she nevertheless though of learning Old Norse "all the time" and "even in the background": "Well, to tell the truth, I was not really pushing myself. Well, when you think about something all the time… *and I think that is what helped me to do it* all the time." (Louise, Q 5.4) As such, because she was mentally and emotionally preoccupied with her L2 learning, she did not perceive engagement in learning as being homework performed at and for a certain time a day.

Similarly, Sahar's preoccupation with Japanese was mentally and emotionally intense despite the fact that she spent relatively little time on learning: "[I]t was definitely something that was constantly on my mind *so, even during lectures… or* sometimes day dreaming about learning Japanese and speaking it frequently…." (Sahar, Q 5.3) Since she was at the university at the time majoring in English (not Japanese), she was only able to engage in Japanese learning in her free time. However, and despite the relatively short time she devoted to Japanese, she considered learning Japanese as the "title" of her life chapter during those two years: "[I]t feels like that is kind of the title of my life if I put my life in chapters so." (Sahar, Q 5.4)

Thus, these examples suggested that all the DMCs were considered as intense. However, this intensity of engagement was not measured by the number of hours the

participants had spent on learning, but by the degree of mental, emotional as well as cognitive and physical preoccupation with their DMCs.

5.3.4.4 THEME 15: PROXIMAL TARGETS

The majority of the participants used a structure that provided opportunities for dividing the tasks into short-term targets, and hence effort was mostly directed towards a closer—not a final—goal. This in turn was especially useful in achieving a sense of direction towards a tangible objective when the final goal was hardly linguistically definable. The majority of the participants aimed for reaching a certain level of L2 proficiency without being knowledgeable of what the exact terms of that proficiency meant. This was even more so for the participants who did not take any institutionalised course or did not rely on any external competency standards.

Suzan, for example, wanted to be able to understand spoken English, which was a clearly-defined goal, but was unable to define the exact level of competency this goal entailed. Therefore, she rather aimed for learning as many words as possible:

> Interviewer: *Did you set yourself any goals…?*
> Suzan: *At that stage I didn't have clear goals* but I need to like, I have to know, I just need to know unlimited words… *but* there is opportunity to see how progressed I was like, sometimes using untranslated movies, sometimes when we go to hospital, because all the staff using English language, I was like feeling victory or succeed when I heard them speak, and I know what they are saying. (Suzan, Q 5.7)

As can be noticed, instead of standardised or regular subgoals to aim for, Suzan used the available resources to check her progress; she used "untranslated movies" and settings where people used the L2 whereby she assessed her L2 level against their speaking in the L2. A clear advantage was that these progress checks appeared as real or authentic

contexts where the L2 was being used by native speakers in the movies, or medical staff who used the L2 in everyday situations. As a result, in these circumstances she felt victorious and happy with her progress.

The participants varied in regard to what they used as subgoals, whether they relied on a set of concrete subgoals, or how frequently these subgoals were used. Therefore, they differed in the degree of whether their use of subgoals was structured. However, they all had a mechanism in place to check their intermittent progress.

Suzan also benefitted from incorporating other progress evaluation mechanisms into her learning routine. When I asked her if watching TV differed during her experience from before, checking progress was a main difference:

> ... I was testing myself and getting the feedback from watching the second time of, because they presented, showed twice during the week, so the first time as studying, the second time testing what I learned to make sure that I know what this word without *seeing its translation*... I was, examine myself.... (Suzan, Q 5.8)

Although setting these short-term targets or points of evaluation seemed to have been more systematic, Suzan found the randomly-occurring opportunities for assessing her progress against the real-world L2 use more powerful in generating a sense of success. However, the incorporation of progress checks into her daily DMC activity seemed more effective in providing immediate feedback.

The latter was also identified with other participants as an efficient tool of gaining awareness of how one was progressing. Shirin, for example, discussed how she added her own way of setting subgoals to make her progress more personally administered and assessed. She was setting herself a daily target of learning five vocabulary items, and then increasing the level of difficulty to reach twelve words per day at some point:

> I was initially learning 5 words a day... I was also testing myself randomly on the words I had learned in that week. This is one, on the other hand, when I was listening to people or on TV or radio, and when I would know the meaning of these words, I *would know that I had learnt them… but later, instead of 5 a* day, I was able to keep 12 words in my memory. (Shirin, Q 5.4)

Thus, she started with setting herself manageable targets and gradually changed it to more difficult, but still accomplishable short-term objectives. Furthermore, she was using daily as well as weekly subgoals or points of assessment; however, she appeared to have practiced her weekly test more systematically so that she would have a clear picture of her roadmap in mind. Additionally, similar to Suzan's case, Shirin also made use of assessing her progress through the non-systematic method of checking her newly-learnt vocabulary against authentic sources of the L2 use on TV and radio.

The other participants seemed to be following an even less-strict mechanism in this regard. A number of participants, Ali, Omed, Louise, Sahar and Suzan, for example, started their DMCs mainly in pursuit of improving L2 communicative skills, for which setting short-term targets was a challenge especially with access to limited resources. However, they all had one practice in common which was the use of translation. The underlying reason for using translation seemed to be related to producing a way to set tangible short-term units to direct their effort towards and measure their progress against. To Louise, for example, besides the vocabulary flashcards she used, reading was more enjoyable because it allowed her to translate some of the L2 content: "*... I think* reading was the most enjoyable thing for me, because I got the vocabulary and the basic grammar, so I could translate some of the phrases, some of the stanzas." (Louise, Q 5.5)

In summary, all the participants made use of some type of proximal goal setting method, whether or not their DMC structure provided it. These subgoals were shorter targets or units of study which the participants focused on, more so than their distal goals. In return, these proximal subgoals provided an effective way of measuring progress and evaluation of improvement. Once the participants completed these steps, they felt their effort was leading to tangible achievement, which generated a sense of success and thus happiness in them.

5.3.4.5 THEME 16: SOLICITED FEEDBACK

The use of feedback emerged as a major theme although the individuals varied in how and where they procured feedback. For many of the participants, feedback was not readily available as they did not follow a systematic method of learning such as taking a course or using a language textbook. However, they still actively sought feedback, which the analysis labelled solicited feedback.

Ali, for example, who did not take any courses but developed his own DMC structure, seemed to have greatly recognised the value of feedback. He therefore integrated feedback into his entire experience both to confirm progress and maintain his momentum. However, with the lack of systematic or institutionalised feedback, he used a variety of other feedback sources. For example, he discussed how he was so proactively seeking affirmative feedback that he utilised his ability to read people's eyes: "*…I would see the effect of this* when I was talking to others in English and I could see in their eyes that they see a change in me, a change in my skills towards better." (Ali, Q 5.8)

Although all the participants followed a personalised and independent structure, no participant reported seeking feedback from others aimed at confirming specific

linguistic aspects of their progress. They mainly relied on subgoals they had set for themselves and their own methods of self-evaluation. Therefore, in all the DMC cases, the participants reported positive feedback only (i.e. feedback affirming progress). It is important to note that the participants sought perceived progress, not actual; none of them reported taking regular systematic L2 tests while in their DMCs. What seemed to be central was feedback signalling and confirming that they were on the right track towards their DMC goals. These signals were in turn interpreted positively leading to positive emotionality, as in the case of Ali:

> ... Just a sentence about my English was enough to arouse this enjoyment. For example, a friend of mine once told me that *when he heard me using the word 'minority', he was content* that my English was good enough. This was a like big certificate for me. (Ali, Q 5.9)

Ali later discussed how he gained the courage to speak in English at work meetings and that led him to interpret his newly-acquired abilities as a sign of positive progress, which brought him a great sense of pride:

> *... And in the evenings, when we would gathe*r with friends, I would talk about these situations, *you know like a hero who's* just come back from an adventure... I mean, in these gatherings, I would lead the discussion and talk about my achievement. (Ali, Q 5.10)

Similarly, although Kardo was studying at a university where English was used, instead of relying extensively on his instructors' formal method of delivering feedback, he chose to supplement the university's grading system with a personally-developed mechanism. He found his ability to speak to others in the L2 a more authentic source of positive feedback than the escalating grades he had received:

> *I was very joyful… because* I saw my grades very high at the university and I was talking to all my lecturers and instructors and people in English! I was feeling wow I can fully understand them and they can fully understand me. (Kardo, Q 5.7)

5.3.5 DMC closure

This section addresses the issue of the final stages of the DMC cases studied. It focuses on how the DMCs ended and how the DMC structures followed helped the participants reach their final destination. Although originally not part of the research agenda of this thesis, the analysis included the final stages of the DMCs and considered whether the participants continued to make use of their structures once their DMCs had ended. Three main themes were finalised on the ending stages of the DMCs.

5.3.5.1 THEME 17: STRUCTURE AS DETERMINANT OF DMC SUCCESS

All the nine participants studied in this chapter achieved their DMC goals. However, here I mention two non-DMC—in that the intense currents did not continue until goal attainment—cases to illustrate the significance of a structure in making any long-term engagement a DMC. I followed both Ezhder and Carla (see Chapter 4) as they were engaged in formal academic studies (MA at a British university) in order to investigate potential DMC cases as they were happening. They both displayed high motivational levels at the beginning of their studies and initial stages of my data collection. However, after a few periodic interviews within a few months, they were unable to maintain their initial motivational surges. Based on their attributions and a general assessment of their interview data, it seemed that their major difficulty was their lack of an established, functioning and personally-endorsed structure.

When I first interviewed Ezhder, he talked about his high motivation and deep interest in his studies, but was unable to explain the structural components of his experience. When I interviewed him again after a few months into his MA, he was still undecided what structural pathway he needed to adopt, and his attempts to develop study routines did not seem to have worked:

> Ezhder: ... I planned with a friend to go to a restaurant, to walk in the morning, and then get some fresh air and come back, and turn over everything and start working, and it really worked for me because it was very productive...
> Interviewer: Did you do that on a daily basis?
> Ezhder: On a daily basis. Every day in the morning, wake up, *walk to the restaurant…*
> Interviewer: Why did you stop it then?
> Ezhder: There were some issues related to that. If I everyday go a restaurant, it costs for me…. (Ezhder, Q 5.1)

Even though his plan of going to a restaurant seemed to be effective for a while, it failed in the long run because it did not suit his personal circumstances (not affording to eat out every day). However, when he changed his plan to go to the library earlier, he again faced the issue of not being satisfied with the available snacks:

> *... In the library... you will just only focus. But there was an* issue, in studying in the library there is the issue of eating. Eating is an issue. *You can't eat…* we will not be satisfied with these small snack or [laughter]. (Ezhder, Q 5. 2)

Clearly, after his previous plans were not effective, Ezhder had not yet developed a structural plan, but was in the process of refining and reconsidering new plans. Therefore, despite that he was at the final stages of his second semester, he felt forced to rely on self-control to maintain his engagement and as a result he felt anxious and bored:

> Interviewer: … [D]o you feel bored, do you feel anxious or things like that?
> Ezhder: Yeah, exactly. *There are times you get bored…* there are some distractions, *you can't focus, you get tired, so you feel bored, anxious, and you're not sure*…. (Ezhder, Q 5.3)

Similarly, when I first interviewed Carla, who was also studying towards an MA in applied linguistics, she seemed to be very motivated and determined to study for a degree in her favourite field. And at a later interview when she was at the middle of her second semester, she was taking two modules and was struggling with at least one of them:

> I am, for both modules I must say, I am not reading as much as I should be reading. For the model that I am not interested in, I am not reading, hardly anything, and, but, I am again very busy with work this semester as well. So I find it very hard to organise myself, not necessarily motivate myself, but organise myself on what I should be doing first and things like that… Last semester I managed to do it, a little bit, not as much as I wanted to do… *This semester I am just,* I am full of paperwork and the two days that I had set for the masters, just seem to be taken over by paperwork for work, my job, and I seem to be very tired in the evenings, so I am not very productive in the evening any more. (Carla, Q 5.1)

At that point of time, it was obvious that she was struggling with her original plan of devoting two days for her MA studies, although she still had a clear goal and willingness to achieve her MA. Her original plan seemed to have been somewhat effective in the first semester, but was clearly not helpful in providing her with a smooth pathway and a set of established study routines.

5.3.5.2 THEME 18: VARIOUS PATTERNS OF DMC CLOSURE

All the DMC cases lost their motivational intensity at some point. A number of trends were identified as to when the DMCs practically ended. Although Sahar was involved in learning the L2 for the entire four years in university, she only considered the first two years to be intense (i.e. DMC). Her motivational intensity faded almost gradually because of two main reasons. First, the DMC goal was no longer valued as before; since she was majoring in English literature, she found little utility in devoting much time to an L2 she might not need to use in the future:

> ... [I]t just became more difficult to find time for it really. So it was a matter of like academic work versus trying to learn a new *language that wasn't part of my degree* and that probably made it more difficult. (Sahar, Q 5.5)

Although seemingly less determinant in why Sahar no longer continued in the same intensity, the second reason was that since her entire experience was based on learning with a group, once the other members discontinued, she also lost interest:

> *... because a lot of my friends who started out with me left* so *they didn't continue with me and it's hard to have like as much* motivation when you are on your own, so it kinda died out after that. (Sahar, Q 5.6)

A second trend was that the motivational intensity gradually ebbed once the DMC goal was achieved, as was the case with Ali:

> Ali: I was shortlisted and I did really well in the interview and got accepted. *I then felt I've reached a good level, like a curve.*
> Interviewer: So after getting the job, your motivation slowly reduced?
> Ali: Exactly, but the decline was not sharp and straight. (Ali, Q 5.11)

The third pattern which was identified with only one participant was the extension of the DMC cycle beyond the originally-planned goal. Suzan's initial goal was to be able to understand her brother and uncle who spoke in English. Suzan was able to reach this level in about six months, but her DMC lasted for nearly two years:

> Interviewer: How long did it take you to be able to understand them?
> Suzan: Actually not much, after six months of focused learning, I *understand them*…. (Suzan, Q 5.9)

Yet, Suzan's intense motivational journey continued despite achieving the goal in the first six months. Suzan's ultimate goal was to show to her family members that she was also capable of understanding spoken English; therefore, her DMC goal was primarily to prove herself rather than reaching a specific linguistic proficiency per se. In the process of her DMC, however, her goal was slightly modified from proving to her family to prove to her class at school or even anyone of her age, and that then became the new DMC goal:

> … I was so focused that I need to learn better than anyone else… I feel that I am strong, I am satisfied. You know when I am learning English I am better than my uncle actually… *But I* feel I need more, I deserve more because I am better than anyone else in my age. (Suzan, Q 5.10)

As such, her modified DMC goal was then to become better than others of her age, especially her classmates who admired her skills in English and asked her for help with translation.

5.3.5.3 THEME 19: AD HOC STRUCTURE

A number of participants reported continued interest in learning and even practice beyond the DMC period. However, adopting the same structure seemed to be no longer effective in promoting intense motivational engagement.

Ali, for example, still kept some of the DMC routines even after his DMC, but in a less-intense motivational mode:

> Even now, when I go to work in the morning, I listen to a radio *show in English… I don't say, it is every day now, but most of* the days I listen to them*... So it is like if I haven't listened to* them for a while, I feel I am missing something, like for example, *if you haven't eaten that kind of food, you* crave it, like that. (Ali, Q 5.12)

Despite this continued practice, simply listening to the radio while going to work did not seem to create a new DMC-like experience. First, he only continued the DMC practice that was easy to follow—that did not require much effort. Secondly, although he mentioned that he was planning to repeat the previous experience in the near future because he needed to improve his L2 further, this continued practice of listening to the radio in the L2 was more of an affective reconnection with his DMC than an actual DMC.

Somewhat similarly, when Suzan entered the university and at one point intended to go through a similar experience for a different goal (being competent in her linguistics classes in university), she found little use in her watching-TV structure:

> *… I started when I was at my second year in college… So,* I returned to my habits, but it w*asn't that efficient. It wasn't like the first time it happened with me…* I tried to get back to the *movies, but I couldn't find the source of information I need* because we study like, more linguistics, parts and it is not like general English, more academic. (Suzan, Q 5.11)

Thus, both Ali's and Suzan's post-DMC practice of the same structure used while in their DMCs yielded no benefits let alone helping them to go through a DMC anew. Whereas simply having a valuable goal (in case of Ali) did not result in a matching structure, Suzan's old structure no longer fitted her new goal.

5.4 Discussion

The aim of this chapter was to investigate whether the participants systematically used a set of learning methods as part of their intense experiences, how they made use of learning resources, and if and how their DMC structures played any role in inducing and maintaining the intense motivational energy that characterises DMCs. Although the DMCs had occurred long before the interviews (see Chapter 4), the participants discussed the structural aspects of their experiences in clear and consistent narratives and relatively enough detail. This implies that a facilitative structure is indeed a prominent component of the DMC construct providing support for earlier conceptualisations of the DMC structure as a salient constituent of the DMC (e.g. Dörnyei et al., 2014, 2015). This chapter can also be considered an expansion of a previous empirical work (Henry et al., 2015) in presenting a comprehensive account of the various stages of the DMC's lifecycle.

5.4.1 How does a DMC come into being?

All the DMC cases studied and presented in this chapter had clear starting and ending points which validates the occurrence of an intense and sustainable motivational experience as an independent and valid psychological phenomenon. All the participants associated the birth of their DMCs with certain personal circumstances and even more

so with a specific event supporting the notion that a "DMC never simply drifts into being but rather is triggered by something specific" (Dörnyei et al., 2014, p. 14). The data contained examples of inducing triggers, such as receiving new information and opportunities, negative emotions resulting from unpleasant situations or events leading to a sense of awakening, or meeting friends sharing an L2 learning goal. Nevertheless, the findings suggested that the power of a trigger remains dependent on a set of pre-existing conditions which, although not sufficient to give rise to a DMC, pave the ground for a potential trigger to be effective. These conditions were having a general goal or personal aspirations, the perception of goal feasibility and one's own control over the tasks needed to reach that goal. Despite that Dörnyei et al. (2016) also list the condition of "openness to the DMC experience" in terms of a number of personality trait conditions, the current findings did not directly support this hypothesis. This in turn can be positive for DMC-generating programmes as the exclusion of these personality trait conditions means that almost any learner can experience a DMC, regardless of inherent personality attributes.

The findings suggested that once a powerful trigger comes into effect, there occurs an almost dramatic unison between the availability of the right trigger and the fulfilment of all the DMC conditions. It was apparent that in most of the cases, the individuals had a general goal for a relatively long period before their DMCs started; however, simply having a goal did not lead any of them to experience a DMC, or a DMC-like motivational surge. Furthermore, when the participants encountered with a triggering stimulus, their goal changed from general to specific, from non-L2 to L2-related, and from abstract to a clearly-defined one. This implies that whereas merely being conscious of the value and necessity of a goal does not lead to the emergence of a DMC, an inducing trigger plays a central role in maturing a general aspiration into a-

linguistically-specified end point. The underlying mechanism behind this necessary change seems to be through providing an individual with the ability to reconstruct their goal and turn it into a vision (Dörnyei & Kubanyiova, 2014) so that an individual could direct his/her energy toward a clearly-envisaged end point.

On the other hand, in order for an individual to experience a DMC, s/he needs to hold the belief that s/he has the capacity to participate in and complete all the activities leading to the goal accomplishment. Acquiring the perception of a challenge-skill balance was found to be necessary, as an imbalance leads to the appraisal of the goal as either too easy or too challenging; whereas the former leads to boredom and loss of interest, the latter obstructs a sense of perceived control and progress (Csikszentmihalyi, 1988). Maintaining this balance has also been proven to have a positive effect on the quality of experience (Moneta & Csikszentmihalyi, 1996).

5.4.2 From intention to action

Once a DMC was launched, the participants experienced more than simply a sense of arousal; immediately after the launch, the participants felt a compelling urge to find a matching structure to embark on a plan of action so their passion was translated into motivated behaviour. Therefore, what characterises a DMC launch is its ability to exceed excitement and fantasy and generate a plan for action. Although decisions about these plans were made spontaneously, the findings suggested that an immediate endorsement of a structure was necessary so the initial motivational burst would remain intact in the face of upcoming distractions. The failure of the two potential DMC cases (Ezhder and Carla) are examples of not only the crucial role of structure in DMCs, but also that without developing a personalised, functioning structure immediately or shortly after the DMC launch, a DMC's sustainability might always be at stake, and

constant switching and trying different plans do not seem to be effective. From a theoretical perspective, delaying the establishment of such a personalised structure will probably only work against the constant release of energy and a clear sense of progress without which a DMC will eventually suffer despite possessing the other components such as goal/vision and positive emotional loading. Although a successful launch probably represents "half the battle" (Dörnyei et al., 2016, p. 58) in what is needed for a DMC, it might nevertheless not guarantee a continued DMC without a proper embracement of a functioning structure.

5.4.2.1 Self-generated structure

The participants used a variety of existing and new resources as their DMC structure. Yet, none of them based their selection on extensive consideration of what might be the best possible structure, and (no-trial-and-error) emerged as a main theme. On the contrary, being doubtful or reluctant to endorse a salient structure seemed to hinder the steady progress of the motivated behaviour. Perhaps a lengthy exploration of what might be the best functioning structure can cause a considerable waste of energy and focus to the extent that it could lead to the DMC failure. In both Ezhder and Carla's cases, they clearly failed to make a smooth and rapid transition to a hyper-drive with established sets of learning routines.

As a result of a hasty endorsement of a structure, the participants discussed how they made their choices without seeking help from others. Although some of them considered their structural choice to be a weakness, the analysis found that these immediate decisions had no negative impact on the subsequent stages of their DMCs. This suggests that a DMC structure is not the utilisation of the proven-as-best L2 learning strategies. Thus, rather than providing support for any universal learning strategies, the DMCs make use of resources that meet two fundamental requirements: to

be personally-appropriate and goal-appropriate. As such, rather than utilising the most effective and backed-by-research strategies, a DMC structure benefits from any, yet not random, set of resources as long as they suit an individual's personal circumstances and match one's learning goal.

5.4.2.2 Personalised structure

A number of themes (such as rejecting others*' advice* and personally-appropriate resources) imply findings which can tell us a great deal not only about the DMC structure, but the DMC phenomenon as a whole. Although a good student might make use of and seek all the resources available, the participants reported rejecting others' advice, including those who were seen as more component in the L2. Taking an L2 course was not purposely utilised by any of the participants, and even the participants who were enrolled in an educational or L2 learning programme did not make use of the expertise or learning methods these institutions had offered to them. Furthermore, one participant (Kardo) even ridiculed the number of hours his university had recommended for students to devote to reading. These findings indicate the participants' strong desire for and commitment to self-reliance and autonomy in choosing how they wanted to proceed with their own learning. This approach was also utilised in all the structural aspects of the participants' experiences, such as in using own standards to interpret progress and obtain affirmative feedback. These trends might suggest an important characterisation of the DMCs which is the dominance of centring oneself at the foreground. Since the entire DMC experience is based on a personalised vision or a self-concordant goal (Sheldon & Elliot, 1999), one seems to strive to protect the experience from losing this individualistic property.

5.4.3 DMC structure and motivational maintenance

A significant research query this chapter aimed for was to understand how a salient DMC structure might facilitate long-term motivation. First, the results revealed that not only did the participants deploy a salient structure, but they also combined all their learning activities within this structure. In that sense, learning did not seem to rely on any and every learning method or material. As a result, a salient structure helped the participants to channel their energy into their DMC goal which in turn reduced the danger of distraction or fear of failure. Gaining a sense of confidence in one's structure was perhaps a main way whereby the participants were able to focus on their effort and progress without much concern over whether their method of learning was effective or not.

5.4.3.1 The dichotomy of behavioural routines and mental/affective obsession

The efficiency of a DMC structure seemed to rely in large part on whether one was capable of reaching a finalised and mature formula relatively soon after one's DMC had launched. This was probably because failure to develop a functioning structure would lead to failure in developing a set of behavioural routines through which learning activities would be performed on automatic pilot (Logan, 1988) and the constant need for volitional self-regulation would consequently be eliminated. Yet, the findings suggested that motivational sustainability was the function of both behavioural routines as well as the participants' mental/affective connection to their DMCs.

5.4.3.1.1 Behavioural routines

Regular engagement in a set of DMC activities seemed to be crucial for maintaining motivation especially for those participants who were leading a busy life, in the

presence of external pressure, or when one was physically exhausted. The findings support three processes through which behavioural routines might help to maintain motivation and engagement. First, DMC routines help an individual to perceive their engagement as systematic; that is, by following a set of routines, one becomes confident that his/her DMC structure provides him/her with the framework necessary to reach his/her goal. Second, by following these routines, one rules out the necessity of continuously searching for additional learning resources and that saves his/her energy and assembles his/her focus. Third, these behavioural routines provide one with a unique opportunity to see his/her progress and receive affirmative feedback about his/her movement and sustainability. Evidence for the latter point was the participants' use of subgoals and their seeking of affirmative feedback, which together made engagement easier to manage and progress simpler to mark (Henry et al., 2015).

5.4.3.1.2 Affective obsession

As the findings illustrated, the participants varied in how much time they had devoted to learning; yet, all the experiences were considered as uniquely intense, mainly because the intensity of engagement was perceived and interpreted in light of its status as one's most preferred or valued engagement—evident from engagement in learning in one's free times (also see Chapter 6). As a result, the participants were preoccupied with their experiences beyond the times and contexts of engagement in DMC routines. As reported in Theme 14, regardless of how much time one spent on L2 learning, the DMC engagement was an-always-present preoccupation. As will be discussed in Chapter 6, although DMC engagement was not always taking the participants' greatest times, the participants were mentally and affectively consumed by their DMCs even at times when they were involved in other daily activities.

This preoccupation seemed vital for supporting the continuation of DMC routines and also for altering the perception of effort. Relatedly, studying in one's free times was a dominant practice among the participants suggesting that engagement in a DMC is not seen as homework: Engagement is probably too emotionally satisfying and meaningful insomuch as one prefers to maintain a strong and constant sense of relatedness. In a DMC, the perception of engagement changes from a task one needs to do to a task one wishes to do. As a result, effort loses its traditional connotation and therefore self-regulatory measures become unnecessary; hereby one might invest the maximum amount of effort towards learning.

5.4.4 DMC closure and non-universality of structure

The cases studied indicate that once fully developed and matured, a DMC structure has paramount effects on the efficacy of a DMC, and is in large part determinant in predicting its success or failure. All the participants who utilised a personalised and functioning structure managed to sustain motivational intensity until they reached their goals—except Ezhder and Carla who failed to adopt a structure with established routines. Although various forms of DMC ending were identified, motivational loss was an inevitable result which implies the finiteness of DMCs.

A number of participants made attempts to make use of, or aimlessly continue practising their DMC routines after their DMCs were over; yet, this engagement did not produce an intense motivational experience. This has significant empirical value as it provides evidence for an important conceptual claim about the DMC theory: a DMC is an integration of a number of factors which altogether help an individual to reach an optimal level of motivational intensity and performance (Dörnyei et al., 2014, 2015, 2016). Therefore, merely utilising a structure used while one was experiencing a DMC

does not lead to a DMC. Despite its facilitative power in launching and maintaining a DMC, a salient structure represents only one factor needed for a DMC to generate its exceptional surge of motivational energy.

5.5 Conclusion

The findings presented in this chapter provided empirical support for the salient structure as a major constituent of any DMC. They also displayed the crucial role of a functioning structure in inducing a DMC and maintaining its cycle; it does that primarily through directing and channelling behaviour and effort within a clearly-defined pathway that includes effective mechanisms for setting short-term targets and measuring progress. Moreover, a salient structure helps to maintain motivation through providing regular occasions for task engagement which, upon repeated occurrences, become established behavioural routines. Therefore, rather than focusing on how to proceed with learning, task performance acquires properties of automatic pilot for which exercising volitional control is no longer required.

Regardless of whether this structure makes use of universally-recognised or empirically-proven strategies, it needs to accommodate one's daily schedule and lifestyle and be appropriate for the specific DMC goal. Therefore, although a number of general principles govern the operation of the DMC structure, the efficacy of each structure is dependent in large part on the specific objective of each DMC and the individual's personal circumstances.

Chapter 6: Positive Emotionality in DMCs: By-product or Motivational Force?

6.1 Introduction

This chapter is concerned with the issue of positive emotionality in DMCs which constitutes one of three major components of the construct. According to Dörnyei et al. (2015, p. 101), "a DMC is characterised by a clear perception of progress towards a desired target, with the resulting sense of fulfilment leading to positive emotionality associated with the process." The experience of positive emotionality in a DMC is different from the intrinsic joy of engagement per se; rather, it is based upon the prospect of goal attainment (Dörnyei et al., 2014). Therefore, whether the task at hand is intrinsically pleasurable or not has little impact on one's reasons for engagement. Once part of a DMC, even an otherwise boring task such as memorising the Highway Code can become enjoyable due to "the feeling that one is doing something useful and meaningful that takes one towards their goal endows it with a unique sense of excitement and fulfilment" (Dörnyei et al., 2014, p. 16).

This chapter presents empirical results of what it is emotionally like to be in a DMC; understanding this experience might also offer insight into the relationship of positive affect with motivated behaviour. Generally speaking, the issue of positive emotionality has received little research attention in the L2 motivation field, in part because the effect of positive emotion on learning behaviour is largely underdeveloped in other disciplines, including motivational psychology (Fredrickson, 1998; Macintyre & Gregersen, 2012). From this perspective, studying positive emotionality within the DMC framework can be considerably useful both for understanding the affective

properties of DMCs, and also in relation to establishing the link between positive affect and motivated behaviour.

6.2 Research questions

The main agenda of this chapter is therefore based on three lines of inquiry informed by three main research questions:

1. How is emotionality experienced in DMCs?
2. What characterises positive affect in DMCs?
3. How was positive emotional loading experienced in relation to learning behaviour?

In order to understand how emotionality functions, and how and whether it affects motivation and thus behaviour in DMCs, we first need to understand how emotionality is experienced in DMC experiences. Thus, the first and foremost question this chapter attempts to answer is: what are the affective properties that characterise a DMC? It is hoped that by answering this question, we can not only obtain descriptive knowledge about what it is emotionally like to be in a DMC, but more importantly, learn if these emotional experiences are different from other forms and other times of engagement; that is, is emotionally experientially different while in a DMC compared to other times and while involved in other forms of engagement? Between these two steps, it is also necessary to identify the peculiarity of positive affect of DMCs as opposed to positive affect in general—hence the second research question.

6.3 Results

As discussed in detail in Chapter 4, the data comprising the analysis of this chapter were collected from two sets of participants. The first included interviews and written

accounts from seven participants (Table 6.1) who discussed their emotionality while in a DMC that they had experienced before (i.e. retrospectively), while the second set was made up of two participants who were interviewed three times within a two-week timeframe while they were in a DMC.

Participant	Gender	Age when experienced DMC	Age at the time of interview	How long their DMC lasted	DMC goal
Suzan	Female	16-18	26	1.5-2 years	To prove to brother and uncle that she could also understand L2.
Sahar	Female	18-20	25	About 2 years	To understand media content in L2.
Shirin	Female	25-27	27	About 2 years	To use L2 for research and teaching career.
Omed	Male	28-33	37	About 5 years	To use L2 for work-related communication.
Ali	Male	29-31	34	About 1.5 years	To be successful at job interviews in L2.
Kardo	Male	18-20	23	About 2 years	To prove that he is talented in L2 use.
Louise	Female	23	26	3 months	To prepare for studying a post-graduate degree involving L2.

Table 6.1: Background overview of the participants

In addition to face-to-face interviews, the participants in the second group (Table 6.2) also drew a developmental chart assessing their moods in the previous few days and also their affect in a typical study session in a two-week period (see Chapter 4).

Participant	Gender	Age at time of data collection	How long into DMC	DMC goal
Helen	Female	27	10 months	To upgrade teaching skills in "meaningful" field of choice.
Adam	Male	31	2.5 years	To acquire research skills to better pursue an academic career.

Table 6.2: Background overview of the follow-up participants

The data collected from all the 9 participants were then combined and analysed deploying a phenomenological approach which resulted in 8 themes and a number of subthemes. In the data analysis process and producing themes, rather than generating statements that explicitly expressed an emotion or affective state, attempts were made to develop themes that could best reflect the data and hence explain why the participants experienced the emotionality they reported they did.

6.3.1 The experience of emotionality in the DMC

The first line of inquiry guiding this chapter was how emotionality (both positive and negative) is experienced while one is in a DMC and what it is emotionally like to experience a DMC. The analysis of both interview data and developmental charts identified 3 themes and a number of subthemes.

6.3.1.1 THEME 1: POSITIVE AFFECT

Throughout all the codes and formulated meanings related to emotionality in the analysis, positive affect emerged as the most dominant theme and was reported by all the participants. The participants used a variety of terms to describe their feelings while

in their DMCs such as “happy”, “enjoyable”, and “excited”, and their entire experience as “good”, “positive”, “pleasurable and also enjoyable”, “amazing”, and “interesting”. Among the statements used to describe their affect, a participant referred to her feeling as “hard to describe” because it was “more than happiness” (Suzan, Q 6.1 & 2), and another participant thought he had experienced “a paradise-living feeling” (Kardo Q 6.1). However, three main types of positive affect were identified as common among all or most of the participants, as below.

6.3.1.1.1 Enjoyment/happiness

Enjoyment was reported by all the nine participants. The analysis identified enjoyment at two main levels: the overall DMC experience (including the mood level), and during engagement in single tasks (emotions level).

6.3.1.1.1.1 Overall experience level

The participants described the overall DMC periods as enjoyable experiences. Helen, for example, thought that “life is in general good” (Q 6.1) and Adam rated his overall experience as “generally positive.” (Q 6.1) A number of reasons were identified to be contributing to this feeling of positivity and enjoyment. To Adam, the source of his enjoyment was that he was making meaningful progress towards approaching his goal: “I am achieving goals now toward the end of the second year, finished some projects, starting new projects, new developments. So it is exciting day by day, it is getting *exciting. It’s the major feeling now*.” (Q 6.2) Similarly, Shirin felt happy because she had found the opportunity and means to obtain a life-long dream of improving her English skills:

> During [that] time I had the suitable location and mechanism which I had long been waiting for. It was a dream come true, because earlier I would see studying in the UK as almost impossible due to difficulty in obtaining a visa, high tuition fees, travelling and other factors. However, this opportunity suddenly became available and realised my dream. (Shirin, Q 6.1)

In addition to making progress towards a valuable goal, overall happiness was due to an altered perception in regard to three main aspects: altered perception toward the L2, toward oneself, and toward life in general. Shirin felt happy that she had a changed view toward the L2 while in her DMC: "It also created self-confidence in me that what appeared to be so difficult and challenging, I was about to achieve it almost easily. And it made me feel that this thing was not impossible.*"* (Shirin, Q. 6.2)

Ali had acquired a new perception about his personal ability as a result of his DMC and that led to happiness and further motivational tendency: "So to be honest, this feeling of being capable made me push even further, to continue learning on a daily basis, and at the same time feel great about it." (Ali, Q 6.1) Moreover and as a result of this transformation in perception about L2 learning and their abilities, the participants felt happy about the changes occurring in their entire life, as Ali further explained:

> I felt a rapid change was occurring to my life, and a positive one. The change was towards being better, so a positive one. When people were talking about the need for growth and development, I actually felt that growth in that one or one and a half years period. I could see that development in myself. I could see that on a daily bas*is*…. (Ali, Q 6.2)

As can be seen from these extracts above, these changes in perception had led to changes in the participants' motivational tendencies. Due to experiencing a sense of change in his abilities and his life after his DMC, Ali for example felt more encouraged

to expend more effort and "feel great about it"; he seemed to have had an increased tendency towards continued engagement.

To many of them, the DMC experience led to not only more hopes in their life and future, but also a sense of direction and meaning. Adam for example described the DMC he was in as an "eye-opening" experience and even a mechanism whereby his life questions made more sense: "[W]hen this wave started, things started to make much more sense. I could see how my future, life is going or should go…." (Adam, Q 6.3) He also acquired a sense of purpose which made his quality of life better. Therefore, he thought he was to choose this engagement regardless of his financial status: "... So even *if I was so rich that I didn't have to work, I'd still do this*." (Adam, Q 6.4)

6.3.1.1.1.2 Task level

At the single task level, the analysis revealed that enjoyment was the dominant type of affect as all the participants reported experiencing it most of the time while engaged in DMC tasks. However, the participants varied in the source of this enjoyment. In many cases, enjoyment was due to the sense that engagement was leading to the DMC goal. To Omed, for example, reading stories in the L2 "was not to kill my time, but had a goal which was being able to use English" (Omed, Q 6.1); however, it seemed that he would also find pleasure in the stories: "The stories were themselves pleasurable and also enjoyable because I was improving my language." (Omed, Q 6.2)

For Helen, regardless of her intrinsic interest in the material, she found engagement in single tasks enjoyable because it would lead to her DMC goal. As a result, even challenging tasks were experienced as interesting without causing boredom:

> It is all interesting because it contributes to the end, of the end goal, even if it is something that is really dry like for example I am not a big fan of statistics, it is a massive challenge for me, but

> because it contributes to the end goal... So there is still the interest there. You know what I mean, even if it is difficult, because I see it as a tool, a means to the outcome end. When you talk about boredom, there is no boredom as well, because right now the topic that I am doing is really interesting to me even if it is difficult or challenging, I am not bored by it. (Helen, Q 6.2)

In addition to Omed, intrinsic interest in the L2 tasks was also reported by three other participants, Suzan, Sahar and Louise. Suzan had a pre-existing interest in watching TV shows in English prior to her DMC; however, once in her DMC, she changed her habit from watching TV randomly and for pleasure into watching specific shows with specific focus on learning certain aspects of the L2:

> *... I always like watching English movies or episode shows, but I was doing it for pleasure...* [Before] it depended on the type of movie they show*, but...* [after the DMC] I took it like compulsory thing to do, and I was focused on episodes where there is *translation...* [Previously] If I missed episodes *doesn't matter* before, sometimes I turned on the TV *because I'm bored*, but after the DMC, no *I couldn't miss one single episode, and I was testing* myself and getting the feedback from watching the second time....(Suzan, Q 6.3)

It is clear from her account that she differed in how she engaged in watching TV; previously, it did not matter if she had missed a show or what type of TV programme she watched, whereas while in a DMC she ensured she watched the episodes that improved her communicative skills, and she watched the same episodes twice—motivated primarily by the goal of learning versus intrinsic enjoyment.

Sahar also discussed how engagement in L2 tasks was perceived as interesting and fun times. Yet, it seemed that this was in part the result of her intrinsic interest in the Japanese language and culture. Therefore, she found engagement as "interesting

past time" and a "hobby" initially, but later and as she encountered more challenging parts of the L2, her engagement became more goal-driven:

> *... At the beginning it was very much* very interesting past time very interesting spending my time on something I enjoy, but I think as I progressed then I had to learn more difficult things*... by that time* it felt like a chore*... but it was* quite exciting to learn new words every time*....* (Sahar, Q 6.1)

Although she continued her engagement despite becoming challenging, for the most part she found engagement to be both intrinsically enjoyable and at the same time leading to her DMC goal of learning the L2: "it was kind of as a hobby and a past time but at the same time improving myself so, it was it was an interesting time for me yeah." (Sahar, Q 6.2)

Similarly, Louise's DMC was based on learning Old Norse mainly because she was interested in reading literature produced in that language. Therefore, engagement was both intrinsically pleasurable and learning as the same time as learning to understand poetry in Old Norse was both a mechanism and a goal:

> I think it was completely hedonistic aesthetic pleasure like when you understand some part of a poetry *like… much better than the* translation, and you think about those bright images that are about it and you feel happy because you are a part of it, because this is a part of your life. (Louise, Q 6.1)

Some participants experienced repeated episodes of flow (see Theme 6). For all the participants, engagement in DMC activities seemed to be one of the most, or the most, enjoyable undertaking compared to other daily involvements. For many of them, engagement in L2 learning was the first priority, not necessarily in terms of urgency,

but mainly in how they affectively rated the L2 engagement, as evident from this excerpt from Helen:

> Interviewer: Would you not rather think about something else other than your study?
> Helen: What else is there to think about? Right now that interests *me nothing really…*. (Helen, Q 6.3)

As a result of this unprecedented level of affective preoccupation, Helen's life had changed from what used to be normal. She discussed how she now lost interest in many social occasions and even day-to-day activities:

> I have turned down two movie invitations, I have turned down a barbeque, a picnic, I have turned down shopping, you know *things like that, I don't even go to the shop* [laughter] to fill my fridge. (Helen, Q 6.4)

6.3.1.1.2 Satisfaction

In addition to enjoyment and happiness, the majority of the participants referred to a strong feeling of satisfaction while in their DMCs. Bing satisfied emerged as a dominant emotional pattern reported mainly to describe the whole experience as evident from this example by Suzan:

> [T]his two years was from the happiest days in whole my life actually, I am, when I think about it, I think I relate it to satisfaction because I am satisfied with what I am doing and succeeding in what I am doing*… I thought I w*as lucky at that period, then I am not lucky again [laughter]*… But as I said the* experience, yeah, it was very, very yeah, enlightenment experience, I was yeah. (Suzan, Q 6.4)

Suzan's satisfaction was not only with what she was engaged in (learning an L2), but rather with herself and her life in that period; as a result, she felt she was succeeding in whatever she was doing.

A major part of this satisfaction was due to acquiring an image that one wanted to have. In addition to proving her abilities to her brother and uncle, Suzan also wanted to be "superior" to her classmates, and her DMC provided that feeling:

> Actually it was mixed feelings, mostly I am satisfied with what *I*'m doing. It makes me feel that I am superior of my friends, or better than them. Yeah so that led to creating feeling of *satisfaction, happiness… I feel that I understand things no one* understands it. So it makes me special in some ways. (Suzan, Q 6.5)

Thus, contentment was not specific to the times the participants were engaged in L2 learning activities, nor because of learning an L2 only. This is evident from this extract by Kardo:

> Honestly, I was listening to English podcasts 5-8 hours a day. It looks a bit of hyperbole, but this is a reality. Beside this, I was reading interesting novels, articles surfing on YouTube watching motivational and inspirational videos made me on cloud nine and I was enjoying every second of my life that time. (Kardo, Q 6.2)

From Kardo's description, it is clear that in addition to spending time on learning specific L2 skills, Kardo also watched "motivational and inspirational videos" which did not seem to be part of the linguistic aspects of the L2 learning, but perhaps one way of making sense of his unexpected, "crazy" transformation which seemed somewhat of a "hyperbole" to him.

6.3.1.1.3 Pride

One of the positive emotions that 5 of the participants explicitly reported in their experiences was pride; however, there were variations in the form and context of experiencing it. As a result of making considerable progress in his learning, Ali felt particularly proud of his achievement and sought out any opportunity to exhibit this feeling:

> So during that two years, I would see some friends every now and then, [and] I would also focus on my experience with them, which *was very nice, because I would be proud of it…*. When we would gather with friends, I would talk about these situations, you know *like a hero who's just come back from an adventure…*. (Ali, Q 6.3)

Suzan also reported frequent experiences of pride, as clear from this example:

> Suzan: [T]he class was about sixty girls, and when the teacher came in front of my desk and explained to me, and leave all the whole class, *as if I am the only one in the world, that's how I felt*.
> Interviewer: The only one in the world?
> Suzan: Yeah, I am the only one, yeah, no one beside me, no one behind me. I am the only one in the class, and in myself, in the whole world. I am very proud of what I achieved. (Suzan, Q 6.6)

Two participants, however, reported experiencing pride in the imagined future. Shirin imagined how proud she would be once her DMC goal was obtained: "And it made me be more optimistic in life, because I would go home with something that I would be proud of." (Q 6.3) Sahar talked about this imagined feeling of happiness and pride more vividly:

> I imagined that I would be very happy once I mastered the language and can read untranslated manga on my own. I would have considered finishing a whole chapter without a dictionary to *be an accomplishment, and I didn't need any prizes or accolades to*

> be proud of what I learned, just being able to read and understand media would be really great for me. (Sahar, Q 6.3)

6.3.1.2 THEME 2: EMOTIONAL FLUCTUATIONS

Although enjoyment seemed to be the dominant affective state for all the participants while in their DMCs, affect was not unchanging throughout. The majority of the participants referred to some instances of fluctuations in their emotionality. Since the emotionality charts were particularly utilised to collect data on these fluctuations, I report the results through the charts and in regard to fluctuations in moods (several days) and in daily emotional fluctuations (single sessions).

6.3.1.2.1 Mood-level fluctuations

Helen described the whole DMC period (her MA studies) as being positive with regular fluctuations but little negative affect:

> ... [T]here are some periods of my time here that were definitely *more happy than some others*…. But if you were to just look at the past maybe about one month or so that I am working on my dissertation, then *it is more constant in a sense that it doesn't spike as much, but it doesn't defer much from*…. *I*t *doesn't go too far* from that mean of happiness, you know what I mean? (Helen, Q 6.5)

It seemed that her fluctuations in affect occurred while she was taking her MA courses and attending classes, whereas her emotionality was settled around positivity in her independent dissertation writing stage.

At the time of interview (3 interviews within 2 weeks), despite variations, she was maintaining positive emotionality: "Some days are better, some days are a little bit more difficult, but overall they are still pretty much constant…." (Helen, Q 6.6) As such, she rated her emotionality level on the developmental chart as around +80 to over

+90 on average which suggested exceptionally high levels of positive emotionality (see Figure 6.1 below). One possible reason for this rating was that she was engaged in autonomous writing tasks that allowed for making "tangible" progress:

> Interviewer: Why are you happy?
> Helen: *I think it's got a lot to do with* the satisfaction that I get from my work. So, that is what makes me happy. (Helen, Q 6.7)

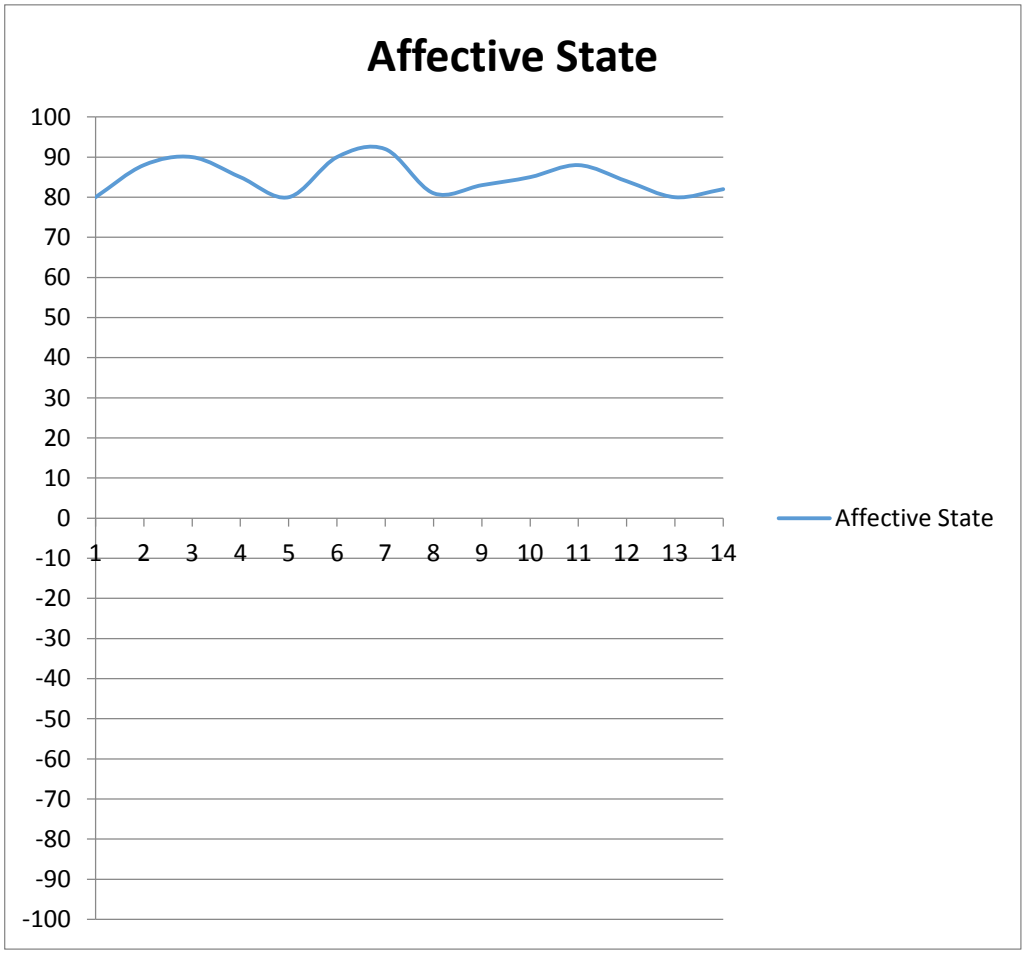


Figure 6.1: Helen's general affective state over 14 days

Although Adam seemed to be experiencing a somewhat similar kind of trend, he differed from Helen in how he drew his emotionality on the chart. In general, he felt he was experiencing "excitement" on a daily basis as he was making progress in his studies as discussed above (Q 6.2). Nevertheless, having neutral or low-mood days was a consistent, although not frequent, pattern in his experience. When I asked him if he had any low-mood days, he described how he felt bored when he needed to spend many hours in collecting data for his studies, especially when data collection spanned extended periods or if it involved hours of waiting: "Well, sometimes I just get bored if I *am collecting data… for example I was collecting data for* three or four months in a *row…* something not really academic*, just like technicality….*" (Adam, Q 6.5) Adam perceived data collection as not "academic" progress but a "technicality" core he needed to do, and based on this judgement he rated three days in the two weeks period as neutral or low in mood (see Figure 6.2).

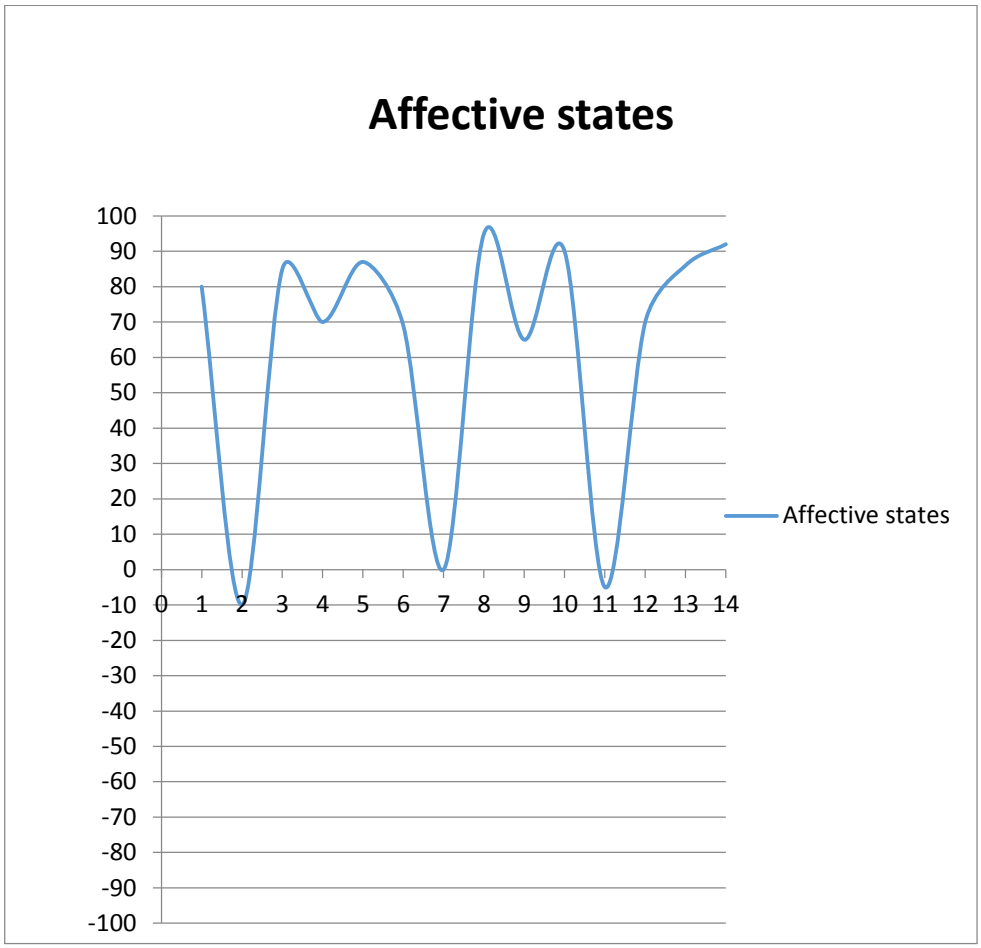


Figure 6.2: Adam's general affective state over 14 days

For him, judging on whether he had a positive or negative day depended on his perceived achievement in measurable terms: "Yesterday, Sunday, was 5.25 hours. So I give myself 90% of satisfaction, because I feel I achieved something." (Adam, Q 6.6) When he was studying for less than three hours, he would feel less positive compared to three hours or more.

6.3.1.2.2 Emotion-level fluctuations

For Helen, enjoyment was usually the norm while engaged in a typical study session. However, moments of negative emotionality did occur. She drew on the emotionality

chart that she would feel frustrated when she faced a challenge only to be followed by a sudden hike in positive affect once she found a solution (see Figure 6.3).

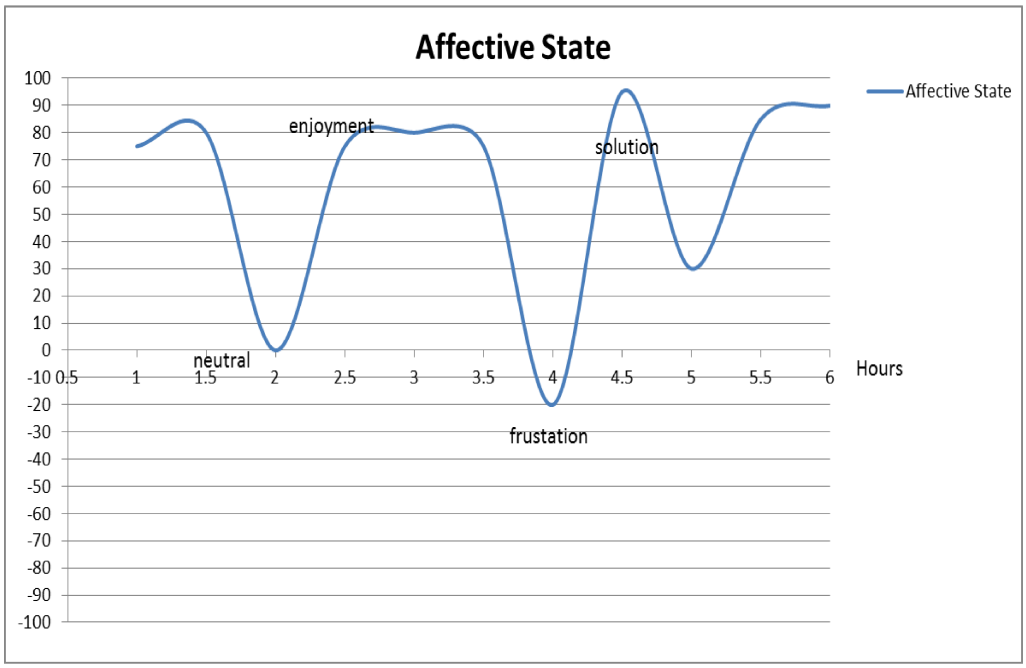


Figure 6.3: Helen's typical affective state in a single learning session

Adam stated that he would usually spend around seven consecutive (with short breaks in between) hours a day on learning. In drawing his single-session emotionality chart, Adam rated his sessions to be mostly positive with instances of frustration in between especially when he would not make progress due to, for example, not finding the right sources of a citation. Moreover, he stated that he would normally start his sessions with a sense of hesitation because he wanted to ensure he selected the right project to work on for the whole day: "I will engage in a big thing" because "you now you will be investing quite a bit of time and effort." (Adam, Q 6.7; see Figure 6.4)

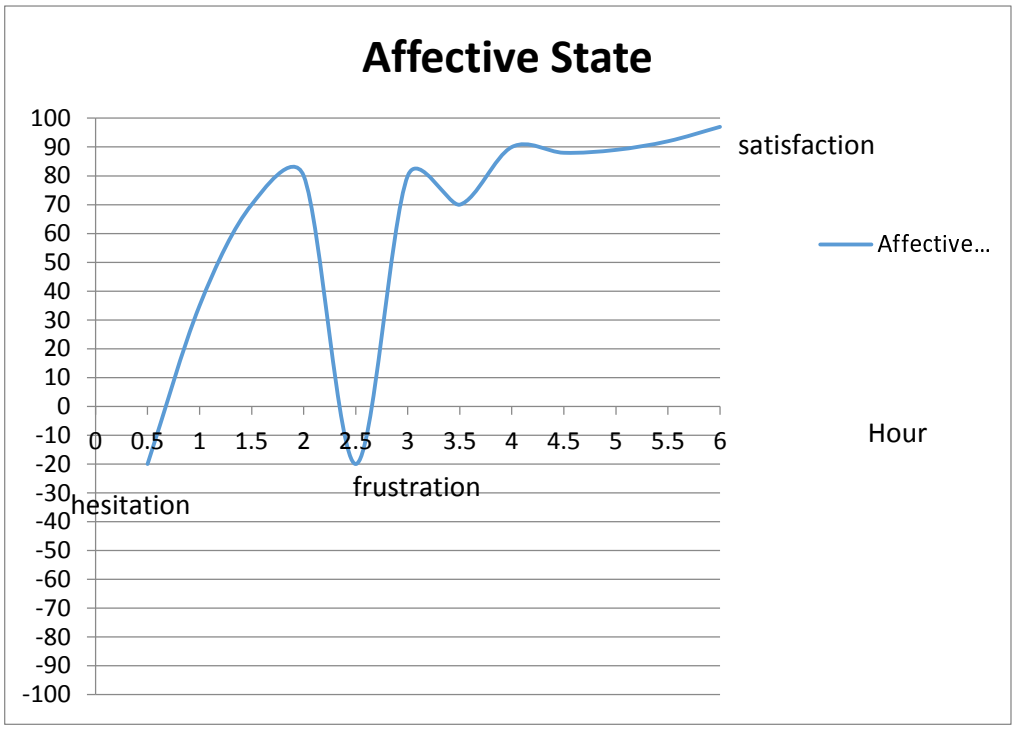


Figure 6.4: Adam's typical affective state in a single session

Once he overcame the initial hesitation, Adam would engage in intense study sessions: "Once you get into it, you just forget about everything and spend hours and hours and hours working on it." (Adam, Q 6.8) As a result, not only would his sessions end with a sense of satisfaction, but he also experienced a sense of achievement and productivity: "*I have high productivity, reasonably high… several hours, five, six hours a day…* This is pure productivity, not standing time*."* (Adam, Q 6.9)

6.3.1.2.3 Factors causing fluctuations

Throughout the dataset, three main factors were identified to have a direct influence on the participants' affective states: sense of progress, positive feedback, and vision.

6.3.1.2.3.1 Progress

Progress emerged as the most dominant factor in the analysis in generating feelings of either happiness or frustration. The participants reported increased feelings of happiness when they were making progress, either through their own sense of actual learning taking place, or through accomplishing tangible task-level goals.

Three of the participants interviewed retrospectively felt that time spent with family was not as productive, and therefore they preferred studying. However, the underlying reason was that they saw other engagements including time spent with family and friends as barriers to their progress in learning. As discussed above, Suzan preferred her L2 learning to spending time with family, but she also considered learning through movies to be of a higher quality and more effective than through the English subject lesson at school, because she perceived that little learning was taking place with the latter.

On the other hand, the feeling of not making progress was the major reason for the participants' reported negative emotions. Sahar, for example, felt frustrated because she could not find enough time to invest in her L2 learning, and Suzan felt bored when the films she was watching did not contain much conversation as she did not find them useful for her communicative improvement goal:

> Interview: *Did you ever feel bored while…?*
> Suzan: I feel bored only when it is *kids' movies* about dogs, and there is no much conversation…. (Suzan, Q 6.7)

Similarly, Louise reported negative emotions in connection with two circumstances:

> ... [W]ell I really enjoyed going out with my friends; I took my flashcards with me, so if we were sitting somewhere in the evening,

> *I'd be reading my flashcards,* but I still enjoyed talking to them. But when we had those you know family meetings or something and *I'm usually at them anyway, and I was just* mad at them, like they were interrupting my studies. And sometimes I was reading something secretly [laughter]. (Louise, Q 6.2)

To Louise, going out with friends was still enjoyable because it did not represent a barrier to her L2 progress as she continued reading her flashcards in their company, whereas family gatherings were perceived as an obstacle to her learning. Secondly, she reported frustration when the difficulty level of the material increased, which was also seen as a major barrier to her progress:

> Interviewer: Did you ever feel bored, frustrated?
> Louise: Yeah, especially with theoretical grammar and all those *paradigms I always feel I can't remember them, i*t was too much information. (Louise, Q 6.3)

In terms of the trajectory of affect in a single session, similar to flow experiences, progress seemed to be necessary to maintain a balance between the challenge posed by the task and one's skills. Helen, for example, discussed how she enjoyed the challenges due to the prospect of making progress, or "the process of cracking the code" (Q 6.8), and once she overcame the challenge of the task, she would feel content and happy: "… And so the underlying feeling is enjoyment, and of course, when I solve the problem or I find a way out, then there is the satisfaction." (Helen, Q 6.9)

It is important to mention here that the participants' affect was influenced by the perception of progress; therefore, it seemed to be necessary that they had a mechanism to measure this progress. The participants discussed the role of progress in terms of tangibility and measurability, as is clear in this dialogue with Helen:

> Interviewer: Why *don't you make progress, is it because of* external..?
> Helen: Sometimes it is really difficult to make progress in, measurable progress, like 0 words today, and at the end of the day 2000 words, like this kind of measurable progress... *like when I* read a paper, I gain knowledge, that is actually progress, but *because that doesn't translate* into a measurable one like 5000 words or something, then I see that, that is a challenge in itself. (Helen, Q 6.10)

6.3.1.2.3.2 Positive feedback

Not only did the participants feel happy when a sense of progress was perceived, but they also actively sought affirmative feedback signalling progress, as made clear by (Ali, Q 5.8) mentioned in Chapter 5.

To Adam, positive feedback was seen as the "primary" factor in determining his affect throughout the whole DMC experience: "... *I think the* primary reason [for positive affect] is that the positive feedback I get that my work is good." (Adam, Q 6.10) Also, at the task level, Adam's positive feeling would usually go up when he would achieve tangible results: "… So when I write the one or two paragraph at the end of the day, I feel I have made achievement. Therefore, my satisfaction goes up towards the end." (Adam, Q 6.11; see Figure 6.4)

6.3.1.2.3.3 Vision

Visualising the moment of achieving the DMC goal had powerful, but varying effects on inducing and increasing enjoyment. Six participants reported moments of visualizing the time of achieving their goals, although they displayed disparities in terms of the exact envisioning and what they envisioned. Examples of clear and tangible visualisation were provided by Suzan, Sahar, and Helen, as in this example: "Sometimes

I imagine that I'm at the University of Cambridge…. I was imagining myself going abroad, studying, majoring in science but in English country." (Suzan, Q 6.8)

In Helen's case, envisioning was also vivid and included both visualised and auditory aspects. To her, imagining the moment of reaching her DMC goal brought "a huge sense of satisfaction": "*… So I actually saw myself standing there and putting the* two copies in there and *I could hear the sound of it falling 'boom'*. And that was what I was looking for to see." (Helen, Q 6.11)

Sometimes, visualisation was associated with experiencing positive affect in the imagined future: "I imagined that I would be very happy once I mastered the language and can read an untranslated manga on my own." (Sahar, Q 6.4)

Not all participants, however, discussed using visualisation. Two participants discussed experiencing vision without providing further details. Another participant talked about deliberately avoiding visualising as a method of emotional self-regulation: "Well maybe it is just a psychological trait, just *my own trait that I don't really like* imagining the future because I know it was going to be different anyway." (Louise, Q 6.4)

6.3.1.3 THEME 3: MOMENTARY NEGATIVE EMOTIONS

In order to get a thorough description of their experiences and accomplish rigour, I asked most of the participants if they had moments of frustration or any other negative feelings or low moods. Incidents of being upset or frustrated were then expressed by a number of participants. However, they were all limited to reactions to events or temporal states rather than a general long-lasting affective state; that is, they were mainly at the emotions/task level rather than long-term mood or overall experience level.

None of the participants spoke about negative affect spontaneously, but only after being probed to report any. When I asked Helen to discuss instances of boredom (i.e. avoiding engagement), she denied experiencing boredom; rather, she said she would only avoid engagement once she was physically and mentally exhausted:

> Interviewer: Do you feel bored at all?
> Helen: *I am not bored… right now* the topic that I am doing is really interesting to me even if it is difficult or challenging, I am not bored by it.
> Interviewer: So when does this happen?
> Helen: It happens when physically, mentally I am just exhausted, *that I cannot do even if I want to, I can't do any more. I know* myself. (Helen, Q 6.12)

However, she did report moments of frustration (although positive frustration to her) when the challenge of the task was greater than her skills: "*... It is a* frustration that stems from the challenge, and because the challenge is right now is bigger than my ability. So, there is the frustration in myself not in the *task…*." (Helen, Q 6.13) It seemed that the challenge of the task would result in frustration, but not the tendency towards avoidance (i.e. boredom).

Adam also spoke about frustration when he was unable to find resources; yet, similar to Helen, he would still find a way to overcome the challenge as engagement would be seen as necessary for making progress towards the DMC goal: "… So there are some frustrations during this, but I find a way to overcome and just go on to reach my goal." (Adam, Q 6.12)

In all the instances of negative emotionality reported, the participants considered them to be minor which would not lead to cessation of engagement. As exemplified by (Adam Q 6.12), the participants seemed to have acquired the ability to overcome these negative emotions due to making a link between continued engagement and goal

attainment. When I asked Suzan if engagement was ever boring because she needed to stay awake to watch her episodes for the second time, she only discussed physical exhaustion; yet, she maintained engagement in these situations because she believed that engagement was necessary and "important" (See Suzan, Q 5.6, in Chapter 5).

6.3.2 Characteristics of positive affect in DMCs

The analysis revealed that positive affect in a DMC was experientially different from positive affect in general (i.e. during most other times and forms of engagement). The two themes below explain this peculiarity.

6.3.2.1 THEME 4: UNIQUE POSITIVE AFFECT

The participants reported experiencing unique feelings while in their DMCs. In response to the interview question asking them to describe their feelings during the DMC period, the participants reported positive affect and mostly compared their DMC experiences to other times in order to demonstrate this uniqueness:

> Interviewer: How was your feeling inside?
> Suzan: Actually, when I remember these days, these days I thought that, even I *can't describe* it because I never felt that feeling again. (Suzan, Q 6.9)

One main reason for this unique kind of positive emotionality was the perception of being productive—versus feeling joyful, for example—. Ali, for example, whose intense motivational experience was triggered by a failed interview, described his newly-acquired capacity as being unprecedented:

> I was feeling happy but also that I have an outstanding ability, honestly. This feeling of outstanding capability *is something I can't* really understand what it is. When I say outstanding, I mean it is

> above your regular human ability... *So I mean I was much* better than any time before. (Ali, Q 6.4)

To Omed, the positive affect he experienced while in his DMC was qualitatively different from other experiences of positivity. He used the word "passion" to indicate this uniqueness:

> Omed: It had occupied a major part of my life. I am actually a *graduate of the Farsi department, but my English is much better…* My passion for English was so powerful that I am now better in English than my own major [Farsi].
> Interviewer: What do you mean by passion? Was it a hobby?
> Omed: *No it was not a hobby…* [It was] a goal for which you make a lot of effort*. Hobby doesn't need any effort…Mine was passion* which requires effort and also changes your life. (Omed, Q 6.3)

The happiness Omed mentions here is clearly different from both the intrinsic enjoyment and the joy of merely making progress towards any goal. This was happiness due to engagement in a life-changing undertaking that had great future implications. Therefore, his motivation for learning English was seen as superior to that for Farsi; whereas the latter was an academic requirement, the former had personal meanings and therefore occupied a major part of his life.

6.3.2.2 THEME 5: UNREMITTING, SUBDUED HAPPINESS

In general, the positive affect mostly experienced while in a DMC was qualitatively different from the common usage of happiness. As described above, satisfaction was a main theme in the dataset and although the participants experienced momentary positive emotions of joy and excitement, the dominant form of happiness was rather in reference to positive mood or happiness all or most of the time—not while

engaged in a learning session only. As such, a deeper form of happiness was experienced that went beyond instances of short-lived emotions.

Although Helen reported positive affect especially as a result of envisioning her final goal, it was mainly constant satisfaction rather than momentary excitement:

> Interviewer: OK, does this envisioning bring any sort of enjoyment while working? Or excitement?
> Helen: It is not excitement, it is satisfaction, it is there always at the back of my head, but it is not something that I will consciously go and dig around my brain to go and find it, you know. It is there at the back of my head, I know it is there, it is present. (Helen, Q 6.14)

Here, it is clear that Helen felt happy beyond the times of task engagement and due to reasons beyond simply adding words to her dissertation. As a result, she had the sense that her happiness is incomparable to the overt joy of socialising or laughter:

> [I]t [her happiness] is not the kind of laughter and joy kind of like you would at a barbeque or a party. But it is kind of more, how do I *say it, it more, I don't really wanna use this word, but a* more subdued kind of happiness. It is not one that you express loudly or publicly, but it is something that you know is there, and it just fuels you to move on and on and on. It is like you are not really aware of your heartbeat, are you, or you are breathing, it is unconscious in *a sense… It is the same for me when it comes to work, not the kind* of happiness, like oh I am happy, you know, but it is very, I am aware that it is there, but at the same time, *I don't have to make too* much of an effort to make it known. (Helen, Q 6.15)

As this form of happiness seemed to be unique or probably unprecedented, the participants found it difficult to share it with others. Helen further explained how people might have thought she was insane if she had told them she was happy about "typing words":

> Interviewer: *Don't you have the feeling to share your happiness?*
> Helen: *I don't think people can understand it. It is kind of difficult to explain it… So I don't share it. It is not something that I feel I can share…* they just think I am insane, like why would I be so happy to finish typing words when they have got bigger issues in life you know [laughter], like taking care of their kids, paying bills, making sure that there is dinner on the table, and ah. So, I don*'t* think I can really share it. (Helen, Q 6.16)

As a result, the individuals experiencing a DMC felt their priorities and feelings were uniquely dissimilar to the majority of people around them, as Sahar reflected:

> [I]t felt like other people were focused more on their future their getting married or perhaps they already are married and they are *focusing on their children and they're talking about their husband* and things like that, whereas we were more focused on looking at Japanese and thinking Japanese and maybe dressing like Japanese *people, so it we didn't look down on them but* we did realise we were quite different because of our hobby and because of this bond we have really. (Sahar, Q 6.5)

Perhaps as a consequence of experiencing this unusual form of happiness, the participants made attempts to make sense of their experience. To do so, the participants developed an unceasing affective connection to their DMCs (see Chapter 5). Although the participants varied in how much time they had spent on learning, they seemed to maintain a conscious mental relationship with their DMCs. Kardo, for example, reported spending time on "motivational and inspirational videos" and Ali narrated how he discussed his positive feelings and progress at gatherings with friends.

6.3.3 The experience of positive emotionality in relation to motivated behaviour

Positive affect had a clear impact on the participants' thoughts and appraisals. The participants sometimes discussed their experience of positive emotionality in conjunction with certain motivational tendencies. In addition to feeling happy about their experiences, they reported their desires to continue involvement in L2 tasks and maintain their engagement in goal-directed behaviours. As a result of positive emotionality they experienced, the participants felt motivated towards further engagement in part so as to experience further positive affect. The themes below illustrate the main experiential mechanisms whereby positive affect influenced motivated behaviour in the DMCs studied.

6.3.3.1 THEME 6: CONSTANT TENDENCY TOWARDS ENGAGEMENT

All the participants expressed a strong desire towards engagement in DMC activities, and as discussed earlier and in Chapter 5, this tendency was an always-present mental and affective orientation. The participants reported their inclination towards engagement in large part due to the prospect of experiencing positive affect upon making meaningful progress; as a result, more engagement was interpreted as the potential for more positive affect. The analysis identified the following aspects as the mechanisms by which positive emotionality led or contributed to increased tendency towards engagement.

6.3.3.1.1 DMC as the most preferred engagement

The participants seemed to have developed a strong emotional link to their DMCs insomuch that they preferred DMC engagement to other undertakings. Helen for

example discussed how she was obsessed with her studies and wished to devote more time to studying, sometimes leading to physical exhaustion:

> When I am not working, I feel that I should work. I wanna go back to work, even when I am physically, some days it is not funny, it is not really not funny, but I am so tired, I am absolutely drained, but *even then my brain won't stop. You know, it won't allow me to* sleep. (Helen, Q 6.17)

Here, it seemed that Helen's preoccupation was beyond the requirements of the task (finishing her MA dissertation). Moreover, she reported rejecting social events and invitations such as invitations to movies, barbeques, and picnics (see Helen, Q 6.4 above).

As discussed above, Louise also preferred studying to social events which she thought were disruptive to her studying. Similarly, Suzan, who used TV shows to improve her L2 skills, stated that she preferred studying to spending time with family as the latter was seen as "unproductive":

> Actually, sometimes when I was sitting with my family I organized *for that night what I'll do, what I'll watch, sometimes* I feel the time I spend with my family is not that productive, we just sitting, chatting, nothing exciting, nothing actually useful. (Suzan, Q 6.10)

Therefore, she reported persistent attempts to ensure her continued engagement in the face of external obstacles from family:

> [S]o I have to watch it whatever the circumstance was, even sometimes like bring my homework in front of the TV so my father *and mom don't say anything because I am studying, but I don't, actually I am watching the TV. They can't understand that I watch* it for learning. *They didn't believe me actually*. (Suzan, Q 6.11)

Since engagement in DMC behaviour was perceived as emotionally satisfying, the participants strived to continue this engagement and its resulting positive affect in three main ways. First, the participants developed usual occurrences of engagement through regular routines (see Chapter 5). Noticeably, the DMC routines were all practised on a daily basis which suggested a tendency towards frequent engagement. None of the participants reported an extended break from their DMC routines except for Suzan who ceased her TV watching habit for a week while in her DMC and during final school exams. However, although this break seemed to be beyond her control, she experienced negative emotionality as a result of the interruption:

> Suzan: I have like, a clear routines there, because as I told you, I watched TV, so every time they present or my show start, it is a daily routine, sometimes I skips exams, studying for exams, for the show, so yeah.
> Interviewer: So did you skip studying for the exam for the show or did you skip the show for studying?
> Suzan: No, I only once I missed the show, when it was a final exam, you know the high school, the last year in high school where the questions come from the ministry?
> Interviewer: Uha
> Suzan: That week I just, was the first time, I skipped the show and actually I cried, because I want to, because it is like, like praying, I have to watch it, *as if I don't have another choice*. But then for normal study and you know normal monthly exams, I just delay the start of my study until I finish the show. (Suzan, Q 6.12)

Second, as discussed in Theme 5, the participants maintained an unceasing affective link to their DMCs even while they were not physically engaged in learning activities (i.e. in the background) as evident from this statement by Sahar:

> [I]t was definitely something that was constantly on my mind so even during lectures I would find myself scribbling in the margins

> of the page like in Japanese and I tried to write notes or sometimes day dreaming about learning Japanese and speaking it frequently, but I think it was just me being fascinated about it that like during that period of my life. (Sahar, Q 6.6)

The third way that was used by many participants was studying in free time. This strategy was especially used by the participants who were too occupied to integrate their DMC routines to their daily lifestyle. Louise, who was too busy with other ongoing commitments, made use of her free time to study Old Norse:

> Well I h*ad to do a lot of other things…* I had to graduate from my home univer*sity and finish my dissertation…* But I used my free time for that, so whenever I was alone in my room. Previously I used that time watching movies, to read some random books, maybe just some comic books, to skype with my friends, but I reduced that and the things is I really wanted that, I was *interested…* [So] I virtually gave all my free time to that. (Louise, Q 6.5)

It seemed that utilising free time was useful in two major ways: first, in helping the participants to maintain regular engagement despite tight schedules. Sahar, who was a university student majoring in English, was unable to have a salient schedule for learning Japanese and used her free time instead: "So I didn't *have* 'Japanese hour at 4:00' sort of thing, but studying while having free times and *more like 'yay finished my assignments, Japanese time', o*r something like that." (Q 6.7) Second, it was effective in generating the perception that engagement was not homework. Suzan, for example, considered learning as "fun" because it was conducted in her free time:

> *It was my free time…* It was my time, because it was study from morning till afternoon, then I have to do work at home, then I have to study, teach my brothers and sisters. So the two hours for movie in the evening was my special time, relaxing time… This is what I

> liked, because this is what I liked about this period because I am watching TV, having fun and learning. (Suzan, Q 6.13)

As a result, the participants thought that learning was taking place without the need for too much self-constraint or effort, as clear from this conversation with Suzan:

> Suzan: ... I find myself get more than what I paid, you understand what I am saying? Yeah, I just having fun watching TV and at the same time I am learning English, so.
> Interviewer: *When you say, I am getting more than what I've paid,* can you elaborate? In Arabic, if you want.
> Suzan: Yeah, because I watch TV, it is fun, it is enjoyable, it is free time, and at the same time, I am getting better in school, in English module, and also I am having this satisfaction of being superior than my brother, what main motivation that I learned from TV, because, because actually studying is difficult, but when it is done by for example by TV, watching movies, it is fun and learning at the same time. (Suzan, Q 6.14)

6.3.3.1.2 Personal, me-time

In addition to performing DMC tasks in their free times, the participants believed that engagement was in main part about oneself and therefore the most enjoyable engagement. Sahar considered learning Japanese as "time for myself": "When time allowed I think, so it was like I go to for free time and as soon as like the more important things are out the way then I could just have that time for myself and learn." (Q 6.8)

In all the cases, the participants had developed a personal association with their DMCs. Suzan for example considered her DMC time as her personal time: "Actually it was my time. I feel that it is for me only. It is like my leisure time or free time, yeah." (Q 6.15) Moreover, engagement was seen as originated from one's own decision rather than to meet any external expectations, as Suzan further explained:

> It is a special because it is meant something to me, because I am doing it for myself not for anyone, because when I go to school, I go to get a degree, to get a job maybe, to satisfy my family, to, you know this stuff, but when I am doing, I am doing it for myself not for my parent, my family, anything. I thought that maybe if I learn English at that way, maybe when I travel someday alone by myself, these dreams. So I thought yeah it is for myself. (Suzan, Q 6.16)

As clear from the excerpt, she found in the DMC behaviour more than succeeding in school or learning an L2; it was aimed at gaining life-long capacities and fulfilling personal future dreams. To Suzan, engagement was emotionally rewarding insofar as it meant having fun, learning, and dreaming:

> [W]hen I watching, watch these kinds of movies, all the actors was hero, have great dreams, they chase their dreams, so why not. So it was like my private time, when I learn, first to have fun, then learn, then dream, actually, I was dreaming during watching the shows [laughter] (Suzan, Q 6.17).

Consequently, positive affect resulting from perceiving engagement as about one's personal goals and benefits seemed to have led to motivation from within, as evident from this comparison Kardo put forth:

> I can, now, differ between th*at period's feeling and now that I am* taking a Petroleum Engineering classes. Now, it is something mandatory, you ought to study and pass, but during my holistic learning of English, no one could oblige me to study or to get ready because I was staying ready for everything all the times. (Kardo, Q 6.3)

6.3.3.1.3 Flow

Many of the participants reported repeated occurrences of flow as discussed above. As a result, in addition to the belief that engagement was necessary to make progress towards a DMC goal, undertaking DMC activities had sometimes become enjoyable

for its own sake. Sahar for example described how engagement in L2 learning sessions was her "me-time" in which she would immerse herself in the L2:

> [I]t was kind of like my personal me-time so it would be just time for me to focus on one thing and I could just shut my door in my room and just really immerse myself in the language and try to learn it. (Sahar, Q 6.9)

As this seemed to have become a consistent pattern throughout her DMC, engagement in the L2 task was seen not only as enjoyable, but, as Sahar said, a "treat for myself" and "Japanese was something that would keep me happy even if I was down so..." and therefore, she "never got depressed when doing Japanese." (Sahar, Q 6.10)

Helen also described her study sessions as being "too long" in which she would lose track of time and even her surrounding environment:

> ... I do too long sessions of work... *I start and I don't stop until* something tells me I have to stop in a way or something disruptive like for example if I am at a cafe I have to stop when they close or they kick me out. (Helen, Q 6.18)

Although she stated that she was still conscious of her surrounding, she would not be interested in anything but her task at hand: "I am not interested in what is going on around me. I am only interested in what I am doing with my computer." (Helen, Q 6.19)

Adam also reported some characteristics of flow in his typical study sessions. For example, when I asked him about his perception of time, he believed that time was going by too quickly:

> Interviewer: Do you think time is going too fast or too slow?
> Adam: Too fast. Just too fast, I cannot keep up with it. Too fast. (Adam, Q 6.13)

Regardless of whether the task at hand was intrinsically interesting, some of the participants had developed an emotional link to the media and materials they used for their learning as discussed above (Theme 1). As such, intrinsic enjoyment and a sense of progress/learning seemed to have functioned jointly to make engagement emotionally rewarding. Consequently, engagement was looked forward to as from this example by Suzan:

> [A]ctually I was waiting, I was holding my watch, waiting because *I just want to start the beginning so I wouldn't miss the scene as I am waiting to the lesson, as if I'm school and waiting to the whistle* of the yeah, the lesson yeah. (Suzan, Q 6.18)

6.3.3.2 THEME 7: ALTERING THE EXPERIENCE OF NEGATIVE AFFECT

As reported earlier, negative affect was experienced by a number of participants. Yet, the dataset did not contain any instances of DMC interruption due to negative affect such as anxiety or fear.

When Louise reported boredom due to increased levels of difficulties of the task, she did not lose her general motivation towards engagement: "... [I]t was more like I was thinking I was stupid [laughter], *that didn't make me happy,* but of course I continued. I thought I just switch to something easier for now." (Q 6.6) As such, instead of avoiding engagement, she changed course and chose to study less-challenging aspects of the L2. From the extract above, it is evident that Louise was unhappy; however, she attributed the reason to her own incompetence (being stupid) compared to the task challenge.

The analysis identified a common pattern of an altered way of experiencing negative affect. When I asked Helen if she was experiencing any negative emotions, Helen (similar to Louise) associated the experience of frustration to her own lack of ability, rather than the task or the process of learning:

> Interviewer: Do you get any types of negative emotions at all? If yes, which of them?
> Helen: If yes, it would be frustration, but it is not a negative frustration if you know what I mean, it is more like a positive kind of frustration. It is a frustration that stems from the challenge, and because the challenge is right now is bigger than my ability. So, there is the frustration in myself not in the task. So I feel frustrated with myself for not understanding something and then as a result of not understanding, I cannot do what I need to do. But I am not frustrated because of the task. So yeah, that is (Helen, Q 6.20).

These two examples above illustrate how the participants experienced negative affect differently through making an altered interpretation. Therefore, instead of discontinuing and avoidance, they chose to continue in the hope of making progress in their learning and thus reducing the gap between their perceived skill levels and the challenges of the task at hand.

6.3.3.3 THEME 8: REGULATION OF EMOTIONAL SYSTEM

The analysis of the entire dataset found a consistent pattern of the regulation of emotionality. To reach this conclusion, rather than listing all the codes related to affect, the analysis utilised a holistic approach to reach a synthesised understanding. It seemed that during their DMCs, the participants' emotionality operated differently compared to other pre and post-DMC times. As discussed earlier, the participants had developed a uniquely strong affective connection to their DMCs to the extent that this emotional link remained active during and beyond the times of task engagement. As such, their feelings towards making progress in their DMCs contributed to their entire emotional system. This regulation was achieved through a number of mechanisms as below.

6.3.3.3.1 Dominance of positive affect

Experiencing positive affect outweighed that of negative affect. The participants reported a considerable amount of positive affect over little negative affect—for which the participants were solicited (not spontaneously) to report any. Whereas positive affect was reported in relation to making progress in goal-directed behaviour, a sense of learning and change, and the entire DMC process, negative affect was restricted to specific contexts or situations and manifested in the form of momentary, short-lived emotions. Therefore, positivity was seen as the norm which in turn contributed to maintaining a motivational approach tendency towards constant and continued engagement.

The emotionality charts displayed in Theme 2 clearly suggested this dominance. In commenting on her developmental chart, Helen described her emotionality to centre on positivity despite variations:

> There is a sense of satisfaction. So it is still mostly positive. Some days are a little bit more challenging but they do not go far from it, you know. The underlying mood is still one that happy, still one that is satisfactory, and it is still pretty much content. (Helen, Q 6.21)

It seemed that positivity was more dominant when the emotional system was considered as a whole, in the form of long-lasting moods which functioned in the background and dominated the whole emotionality. Therefore, regardless of how one felt momentarily or while engaged in single learning tasks, the underlying happiness remained mostly unvarying: "[It is] not a kind of happy where like you know I jump of joy kind of happy, but a more quiet temper sort of happiness." (Helen, Q 6.22)

6.3.3.3.2 DMC as determinant of affect

Progress in DMC activities seemed to determine whether one felt positive or negative in general. When I asked both Helen and Adam about their affective states especially in the last few days preceding the interviews, they both based their appraisal on their performance in the DMC tasks. Helen for example associated her happiness to satisfaction from her studies, as clear from (Helen, Q 6.7) mentioned above.

Adam discussed his emotionality based on a similar criterion, that is, achievement in his DMC activities:

> [W]hate makes feel positive or negative is the achievement I have had in the past few days... *In the evening, I look back and think* about my achievement on that day. If I have worked a sufficient amount of hours, I feel satisfied. If not, maybe upset. (Adam, Q 6.14)

This appraisal seemed to be an ongoing process of assessing one's affect in relation to one's achievement in the immediate tasks; that is, one's emotionality was primarily influenced by how one was doing in one's DMC. In the light of this perception, engagement in DMC behaviour implied the prospect of experiencing positive affect. As a result, the anticipation of potential positive affect seemed to have urged the participants to maintain engagement which occurred through a number of processes as below.

First, the participants associated engagement with productivity and that brought happiness to them. To Louise, the main reason why she wished to go through a similar experience was the quality of being productive and thus happy:

> Interviewer: Would you wish to repeat that experience, maybe not with language, but with any other stuff?
> Louise: Oh absolutely, because it makes you happy, you know. So you are really productive, but what I like about it is more the

> process than the result. You feel everything has a meaning when you are doing something. And when you are just simply working, *you wonder what is it about and in such periods you don't have this* question, you are just burning with that. And I really like this feeling. (Louise, Q 6.7)

Also, and as mentioned earlier, Suzan preferred DMC engagement to spending time with family because the latter was not perceived as productive, whereas she said: "I like spending time like that [i.e. DMC task] because it is productive…." (Q. 6.19)

Second, since a considerable amount of positive emotionality originated from the perception of meaningful progress, the participants strived to ensure that actual learning was taking place rather than merely completing the steps of the pathway. For example, Sahar associated her positive feelings during her DMC with her motivation for learning rather than simply obtaining a degree:

> I do definitely miss the passion I had during that period because I was driven solely by interest to learn this, whereas like everything else I do in school or in my Masters and PhD is towards getting an academic degree…. (Sahar, Q 6.11)

Third, since DMC engagement was associated with a sense of deep happiness, the participants made attempts to make engagement both frequent and sustainable. As discussed in Chapter 5 and above, this goal was achieved in part through incorporating DMC routines and maximising engagement time. In addition to regular occasions for engagement, the participants also changed their daily habits so they were performed in the L2, as Ali said: "Actually, I was so into it that I had changed my everything into English, so not just as homework to get to it at home, no." (Q 6.5) Therefore, engagement was less seen as tedious homework, and restricting learning to specific hours sounded meaningless as Kardo explained:

> I would love to point out that listening to English podcasts, reading nove*ls and articles, writing essays…* were not only became a daily mundane, they became a part of me, part of my life, or to be more precise, the all things in my life. That period, there was a day that I was reading 10-13 hour whereas we were told from our instructors that the reading hour is 7 hour per week which was thoroughly meaningless to me. (Kardo, Q 6.4)

6.3.3.3.3 Reducing occurrences of negative emotions

As a result of being affectively preoccupied with the vision of learning and making meaningful progress towards a valuable goal, the participants seemed to feel happy beyond the DMC frame: they seemed to be happy about their life as a whole. In addition to creating a positive mood, the DMCs increased the occurrences of positive emotions and reduced the instances of negative emotions—in part through experiencing them differently, and in part by restricting them to specific and momentary situations. Furthermore, it seemed that engagement in DMC behaviour reduced the impact of negative emotions caused by day-to-day circumstances. Sahar, for example, explained how learning Japanese would make her happy even during low-mood moments:

> Japanese was something that would keep me happy even if I was down*, so I guess during when you were younger you'd get your ups* and downs or you get depressed some days but I never got depressed when I was doing Japanese, so that was the difference for me. (Sahar, Q 6.12)

6.4 Discussion

The three main research questions that guided the research presented in this chapter were how emotionality is experienced in DMCs, what characterises positive emotionality in DMCs, and whether and how positive emotionality impacts behaviour. This latter issue is of extreme significance—and in many ways the conclusion of the first two. Despite that emotions have long been thought to be "processes which arouse,

sustain, and direct activity" (Leeper, 1948, p. 17), the nature of the relationship between positive emotion and motivation has rarely clearly been theorised and the "motivational properties of emotion have been severely underestimated in the language learning literature" (MacIntyre, 2002, p. 61). As the state of affairs has not changed much recently, the study presented in this chapter can then be seen as one of the first attempts to make that link.

All the participants reported a considerable amount of positive emotionality compared to very little negative affect, which might lead us to generally conceptualise DMCs as happy and enjoyable experiences. For the participants who recalled their DMC experiences long—mostly, several years—after their occurrence, it is possible that the participants were at least partially under the effect of remembering self (Kahneman, 2011; versus experiencing self), which assumes that people's judgement of a particular experience is greatly influenced by how the peak or end of that event was experienced. Nevertheless, with this limitation from this potential bias in mind, it is important to note that all the participants narrated their stories with zealousness and pride and most of them shared their strong and often explicit desire to go through the same experiences again. On the other hand, the two participants who were interviewed a few times over a two-week period while in their DMCs reported predominant positive affect in most days and single-study sessions; as observed from the developmental charts, the tendency towards positive affect was evident.

Nonetheless, in addition to this dominance, the experience of positive affect was qualitatively different from experiencing positive emotions at most other times. In describing their DMCs as unique, the participants in large part made this judgment in affective terms. In this regard, they particularly emphasised experiencing subdued happiness, long-lasting positive mood, and satisfaction. The findings suggested that the

underlying reasons behind these emotional patterns were based on two different, yet complementary appraisals: making tangible progress towards a personally valuable DMC goal, and a perception of productivity, skill acquisition, and personal development. These two processes seemed to have given rise to two types of positive emotionality: anticipatory positive emotions (current experience of an emotion because of an event in the future; Baumgartner, Pieters, & Bagozzi, 2008) in respect of an important future goal, and eudaimonic happiness in regard to a sense of self-actualisation and growth (Ryan & Deci, 2001). Whereas the former led to short-lived emotions of excitement and joy, the latter was associated with unremitting long-term positive mood and satisfaction.

6.4.1 Vision, eudemonia, and motivated behaviour

Despite a strong dominance of positive emotionality in DMCs, the exact mechanism by which DMCs make use of positive emotionality is far from being straightforward. Nonetheless, the findings provide strong evidence for the impact of positive emotionality on motivated behaviour. Whereas this impact was more apparent when the participants harnessed the power of envisioning their future, the role of eudaimonic happiness seemed to be less immediately visible but more paramount in engendering a long-lasting motivational tendency towards engagement.

Positive affect was in part the result of making progress towards a final DMC goal, and was experienced in response to signs of tangible progress and positive feedback. However, the perception of progress towards a cognitive DMC goal needed to be accompanied and supported by envisioning (Dörnyei, & Chan, 2013; Dörnyei & Kubanyiova, 2014) to yield empowering positive emotions. Envisioning a final goal generated positive affect, especially short-lived emotions of excitement and joy that

seemed to have a strong, although temporary, motivational effect. Theoretically, these emotions are generated as a result of the formation of possible future selves (MacIntyre & Gregersen, 2012) which represent a learner's perceptions of what they would like to become, what they might become, and what they are afraid of becoming (Dörnyei, 2009a; Markus & Nurius, 1986). The motivational effect of envisioning is thought to be the result of the harnessing power of imagining one's ideal L2 self (Dörnyei, 2009a). The findings presented in this chapter are thus consistent with what MacIntyre and Gregersen (2012) have recently proposed that "the motivational force behind possible future selves stems in large part from anticipatory and anticipated emotions" (p. 199).

Along with positive emotions resulting from goal-oriented progress, the findings suggested that not all positive affect was due to a final goal or vision. Eudaimonic happiness seemed to be another source and the reason behind most of the positive affect. The findings suggested that happiness was experienced in part due to the engagement itself such as finding the materials enjoyable, satisfaction with what one was doing, pride, and flow. Moreover, a sense of productivity and actual learning pushed the participants to develop a strong tendency toward constant engagement. Therefore, the finding that DMC engagement was preferable to spending time with family and friends or even to relaxing during one's free time comes as no surprise; whereas the latter was thought to bring hedonic pleasure and joy, DMC engagement was perceived as being about acquiring new skills and discovering and developing one's potential (Waterman, 1993).

Motivated behaviour seemed to have been resulted from the combination of both of these forms of positive affect. The increased and unremitting tendency toward engagement was generated by both the joy of making progress towards a valuable goal and the prospect of experiencing happiness in the here-and-now. Therefore,

experiencing positive affect was seen as both a mechanism serving to signal meaningful progression and also an end it itself. For example, the participants reported repeated occurrences of flow; yet, happiness in flow was different from how happiness is described in flow theory (Csikszentmihalyi, 1988). In a DMC-flow, goal-orientedness plays a central role, versus a mechanical purpose as in flow theory; the participants associated their happiness with, and measured their progress against making progress towards a final DMC goal. At the same time, progress was considered as meaningful when a sense of actual learning and productivity was perceived, rather than merely completing the steps of the task at hand as in flow theory.

While in a DMC, the findings revealed that one's entire affective system is regulated and centred on positivity, and this influences the motivational system. This regulation was achieved through a number of processes. First, through the dominance of positive affect, instances of positive emotions increased and negative emotions decreased. The ratio of experiencing positive to negative emotions has motivational implications; Fredrickson and Losada (2005) have found that flourishing individuals (i.e. those who "live within an optimal range of human functioning", p. 678) have a general ratio of 3-11 positive emotions to each negative emotion.

Second, this regulation empowered the participants to experience negative affect differently and thus reduce its disruptive effect. For example, some of the participants interpreted their lack of progress as a sign of not making enough effort and reported experiencing frustration as a result; however, instead of avoiding engagement, they expended more effort to fill the gap so they could overcome the negative feeling (or perhaps guilt) and experience positivity again. The participants seemed to have acquired the ability to interpret frustration in the interest of their DMCs, consistent with some research that "it is the way a person interprets a situation—rather than the situation

itself—that gives rise to one emotion rather than another emotion" (Siemer, Mauss, & Gross, 2007, p. 592)

Third, the dominance and frequent experiences of positive affect seemed to have enabled the participants to enhance their durable personal resources (Fredrickson, 2001, 2009). According to Fredrickson's broaden-and-build theory (Fredrickson, 2001), positive emotions "broaden people's momentary thought-action repertoires, which in turn serves to build their enduring personal resources, ranging from physical and intellectual resources to social and psychological resources" (p. 218). The notion of broadening-and-building personal resources seems to partially account for the mechanism by which DMCs make use of positive affect to produce their motivational stamina. Fredrickson (2001) proposes that certain positive emotions broaden one's thought-action repertoire. Among these emotions, interest produces the urge to explore and develop self; contentment generates the urge to savour life events and incorporate them into new self and world views; and pride urges people to share their achievements. The occurrence of these emotions and their resulting tendencies in the data such as the constant tendency to develop one's potential, having newly-acquired perspectives toward self, the L2 and life, and strong desire to share personal achievements seem to indicate the "durable" impact of positive emotion on long-term engagement in DMC experiences. While the reported outstanding stamina to engage in L2 learning activities can be considered as the broadening power of physical resources, the tendency to remain involved in a task despite its challenges, is an example of expanding psychological resources to fight negative emotions such as boredom, lack of interest, and anxiety.

6.5 Conclusion

Positive emotion is the dominant form of affect while one is in a DMC which comes from two main sources: making meaningful progress toward a valuable DMC vision, and a sense of productivity, learning, and personal development and growth. These two sources generate increased occurrences of short-lived positive emotions of excitement and joy, flow, but also and more importantly, long-lasting positive mood and subdued happiness. Combined together, they lead to the regulation of one's entire affective system through which engagement in learning activities and feeling happy about it becomes the norm, reflecting the human tendency towards optimal psychological functioning. In addition to supporting long-term personal resources, this affective regulation gives rise to the dominance of positive affect whereby the disruptive effect of negative affect is minimised and a constant tendency towards engagement is maintained.

Chapter 7: Group DMCs: The Maturest Form of Group Performance

7.1 Introduction

As argued in the previous chapters, DMCs are intense motivational surges capable of turning an otherwise inert or struggling individual into a highly productive and functioning agent. Yet, once applied in the L2 field, the construct's applicability remains limited because most L2 learners are students engaged in L2 processes in group-based environments, such as classrooms. Therefore, it is ultimately necessary to investigate the occurrence of the phenomenon within groups of learners. Nevertheless, the scope of this inquiry must not be limited to whether a group DMC occurs; it should extend to the major characteristics of such experiences, and how group DMCs differ from individual DMCs. More importantly, it is essential to understand how the concept of group DMCs can be a new contribution to the research on group performance. From a practical perspective, it is of considerable significance to investigate whether group DMCs can help L2 teachers and how they can be utilised in actual classroom settings. As such, the empirical study presented in this chapter aims at offering a theoretical justification for the validity and necessity of the DMC concept in groups, as well as proposing pedagogical applications of DMCs in L2 teaching settings.

7.2 Research questions

As part of the DMC theorisation, Dörnyei et al. (2014) have argued that DMCs can be experienced by a group of individuals such as a class or even an entire school. As such, similar to individual DMCs, group DMCs have the potential to be used as a

supplementary motivational boost in support of the motivational techniques language teachers already use in their teaching.

In order to validate and further explore these conceptual claims, this chapter seeks to empirically study group DMCs. To do so, the data analysis was guided by five research questions:

1. What are the major phenomenal characteristics of group DMCs?
2. What are the experiential properties that contribute to the efficacy of group DMCs?
3. How do group DMCs differ from individual DMCs?
4. What are the timescales and group size levels at which group DMCs can occur?
5. What are the pedagogical implications of group DMCs?

7.3 Results

The results presented in this chapter comprise data collected on 7 group DMC cases, and from 4 teachers (Alia, Jason, Leila, and Sophie) who recognised and remembered at least one group DMC in their students, a school principal (Safeen) who perceived that his entire school of 350 students experienced a group DMC, and also from 4 students (Huan, Sahar, Sami, and Tom) who experienced a group DMC along other group members (see Table 6.1; also see Chapter 4 for more information on the participants).

DMC Case	Data source	No of group DMC members and Level of students
1. Sahar and classmates	Sahar (student who together with 4 classmates experienced a group DMC involving learning Japanese).	5, University (Undergrad)
2. Jason's Thai class	Jason (L2 teacher who taught English to a class in Thailand who experienced a group DMC).	20, University (Undergrad)
3. Sophie's project group students of 5	Sophie (L2 teacher who taught academic presentation to 2 classes from which a group experienced a DMC).	5, Pre-sessional course (preparation for MA in the UK)
4. Alia's class	Alia (L2 teacher who taught academic writing to a class in Saudi Arabia who experienced a group DMC).	20–25, University (Undergrad)
5. Booster weekend activity – Group A	Leila (L2 tutor who taught English to a class from which group A experienced a group DMC) and Sami (student and member in group A).	6, Pre-sessional course (preparation for MA in the UK
6. Booster weekend activity – Group B	Leila (L2 tutor who taught English to a class from which group B experienced a group DMC) and Huan and Tom (group members in group B).	6, Pre-sessional course (preparation for MA in the UK)
7. Safeen's evening school	Safeen (an evening school principal in Kurdistan whose entire school experienced a group DMC).	350, High school

Table 7.1: Overview of the group DMC cases and those interviewed for each case

The dataset comprising this chapter was rich and comprehensive because it contained data from teachers about DMC cases in their students (i.e. an outsider's perspective), students who were members of group DMCs (e.g. Sahar), and also a combination of both teachers and group members involved in the same DMC cases

(e.g. Leila and 3 of her students). In that respect, limitations posed by biasedness or a lack of accuracy due to soliciting data from only one person was addressed. Moreover, since many of the DMC cases were collected long after their occurrences and in order to reduce the impact of the remembering self (see Chapters 4 and 6), data from Cases 5 and 6 (i.e. Leila's students) were collected after a relatively short period (within 2 months) from the DMC occurrences (see Chapter 4). Data collected about these two cases (Cases 5 and 6) and the school DMC case (Case 7) were particularly useful to gain valuable information about DMCs occurring within a short timeframe (3–4 days) and DMCs occurring to a large number of group members (350 students).

Apart from initial coding and producing textual and structural descriptions (see Chapter 4) for each group DMC case, all the data were combined together for analysis. An iterative phenomenological data analysis focusing on reporting what happened and how it happened with regard to the specific research questions mentioned above identified 14 themes and a number of subthemes. In doing so, both patterns common among various cases and unique threads were taken into account.

7.3.1 Characteristics of group DMCs

The first area of inquiry was identifying the main characteristic features of a typical group DMC. This section also aimed at learning about the most defining fundamentals of the phenomenon when experienced by a group of learners, versus individual DMCs. Two main themes were identified.

7.3.1.1 THEME 1: CONSPICUOUS MOTIVATIONAL TURN

All the group DMC cases considered shared a dominant characteristic by which the participants mostly recalled the experiences: a pronounced turn in the motivational level of the groups. This feature was also noticed at the recruitment stage and made the data collection process easier as the participants almost immediately resonated with the motivational momentum as a main element of their or their students' experiences. Jason for example still remembered such an instance in his students after 30 years from its occurrence:

> I can recall a class of Thai university students, a group of 20 students, who went beyond their own expectations through motivational momentum. This example takes me back to 1980 when I taught at a [Thai] University, but I always remember that class with fondness and amazement. (Jason, Q 7.1)

Not only did the DMC groups witness a motivational shift, but they also had a low motivational level prior to their DMCs. Alia, for example, who started teaching English writing to a class of second-year Arabic-speaking university students, remembered the class as being initially not motivated:

> Well, *at the beginning, they didn't seem that motivated actually* to put in a lot of effort in their work. And this was apparent from *their first assignment… because* they were used to it in their first year…. (Alia, Q 7.1)

In addition to their low motivation, the students also had lower expectations as "they *were used to it"*; therefore, being asked to produce academic long writing was considered a new trial. However, by end of the semester, Alia's class performed beyond their expectations: "… like a lot of them were really surprised actually at their first marks, because th*ey didn't expect to do as well.*" (Alia, Q 7.2)

In a similar vein, Sophie, who taught two classes that included several project groups, was easily able to detect a DMC group who had made a dramatic shift in motivation: "I remember this particular group, because they just stood out among the others. I remember this was a very dynamic and supportive group." (Sophie, Q 7.1) Yet, the group members were initially unmotivated, unwilling, and unsure why they needed to conduct a project:

> *At the beginning, they were not really sure, they didn't really* want to do this sort of thing, like what is this? And they struggled a bit. I could see from first two sessions. I really had to motivate them (Sophie, Q 7.2)

7.3.1.2 THEME 2: OVER AND ABOVE NORMAL MOTIVATIONAL LEVELS

After their DMCs started, all the groups displayed motivational levels greater than before and after the DMC timeframes. Students in the booster weekend project, for example, were seen as more motivated during the project in comparison to their normal motivational levels before the activity. Tom (Q 7.1) for example described the experience as "a really great experience and unforgettable memory" and Sami recalled the experience as "the most time of being motivated for a project, for a project, only for a project" and "the best time of working on a school project", and therefore "the experience was overall amazing and enriching and satisfying, and also a new experience for me." (Sami, Q 7.1, 2, 3)

Noticeably, in their assessment, the group members meant their group (not their individual) motivation; that is, they described their experience as unique compared to their previous or later group work as evident from Sami's emphasis "for a project only". However, it seemed that members of both groups A and B performed better than when they were working individually or in groups while in the normal classroom setting, as their tutor Leila narrates:

> Seeing them in class normally they need a lot of guidance with *any kind of task…* they needed prompting*… But in just about* two days, they produced a massive amount of work that showed that their motivational level was very high... they spent pretty *much every minute of that weekend working…* and they worked much harder and the quality of work was higher. (Leila, Q 7.1)

Although there were more than one reason for their intense motivational level in that activity which I discuss below, one reason provided by Huan (Q. 7.1) was the enjoyment of working in a group: "staying with each other is much more fun than spending time alone."

7.3.2 The launch of the group DMC

The analysis of the initial circumstances of the group DMCs identified patterns different from what characterised the DMC launch in individual DMC cases discussed in Chapter 5. Theme 3 and its subthemes below summarise these findings.

7.3.2.1 THEME 3: SLUGGISH DMC LAUNCH

Unlike individual DMCs (see Chapter 5), the group DMCs did not have a dramatic and immediate launch. The groups seemed to require both a period of time and the fulfilment of a number of conditions before entering a DMC. The analysis of the dataset identified a number of conditions that needed to be met before a group made a transfer into a DMC.

7.3.2.1.1 Perception of value

Sophie explained that the group of her students who experienced a DMC did not immediately become motivated, mainly due to a lack of belief in the utility value and

usefulness of the project assigned to them. Sophie also narrated how one student, who happened to be older than the rest and the only male in the group, was not convinced why they needed to do the task and that was a major barrier: *"...* [T]he *German guy already had a PhD. I don't know why he was sitting there. So he was* kind of the group leader, but he was a bit demotivated. *He didn't want to do this, like* why." (Sophie, Q 7.3)

Although recognising the value of a project seemed to be a challenge with those groups that were assigned a group task (versus of their own accord), the groups or their teachers used a number of strategies to achieve the perception of value. For Sophie who was teaching academic presentation to L2 learners and gave the students projects that did not necessarily include explicit L2 acquisition aspects, she initially explained the value of acquiring academic presentation skills for the students' future careers:

> So I would be telling them actually whatever jobs that you have*... even I was telling them that when you talk to your boss* in a lift, that's a bit like a small talks that you do, which are not public speaking, *but conversation and that's* still presentation in a sense. So they had the motivation. (Sophie, Q 7.4)

Alia, however, made use of a rather negative technique to awaken the students of the dire consequences of not improving their writing skills:

> Well, after their first assignment, I did a group feedback exercise, where I took of the worst assignments basic*ally... and* basically discussed what was wrong with the essays in front of the whole class... So it was basically a kind of shock tactic that I tried to use to make them feel motivated to work, because their degrees were on the line here. (Alia, Q 7.3)

7.3.2.1.2 Endorsement of task

In addition to realising the value of the activities, the groups needed to understand the activities' relevance to them and then accept and endorse them as personally meaningful. In Sophie's group of five students, finding and agreeing on a topic which all the members found to be interesting and meaningful was a prerequisite for a potential group DMC:

> [T]hey were struggling, they were still looking for a topic, and then they found a topic which they liked. It was about *Facebook…* so, they could relate, they liked the topic, and they knew that people would find it exciting*… they found something* important and meaningful to talk about. (Sophie, Q 7.5)

Here, not only did they individually seem to have liked the topic, but they also thought that the topic would be interesting to their potential audience, and this seemed to have also contributed to their endorsement and then motivational turn.

7.3.2.1.3 Consensus

Whether or not all members of a group intrinsically liked a topic, reaching consensus was identified as an important factor in helping the groups embrace their projects. Sophie discussed how the DMC group became more functional and enthusiastic once they reached a final decision about what topic to choose for their presentation:

> They were getting to know one another. It was all new to them. But as soon as they got more of an idea of what they had to do, so they could understand, they feel that they were in control, and then they found a topic. I remember, some people had stronger opinions…. (Sophie, Q 7.6)

Reaching consensus seemed to be motivating in making them united, giving them a clear idea of what they needed to work towards, what the expectations would be, and thus providing the group with a sense of perceived control and group confidence.

The motivational impact of reaching consensus can be seen if we compare how this group selected their topic versus how other groups did so. Sophie noticed how the DMC group differed from other groups who did not go through disputes or group negotiations over their topic:

> ... [T]hey did spent quite a lot of time looking for a topic that they liked. *So that's something a little bit different than other* groups, because I also remember some other groups, this one particular group that just chose something, something that I suggested. I gave them some examples and they just pick something up *and said 'ok we work on this'*. (Sophie, Q 7.7)

Thus, two kinds of group consensus were identified: the first kind was when the group members accepted (almost randomly) a topic suggested by their teacher, and the DMC group that reached consensus through worked-out compromise. Importantly, the motivational effect of this variation seemed to have remained beyond the initial stages of a group's life. Sophie continues narrating how the group who had not endorsed their topic did not display motivation in part because they did not enjoy it, whereas the DMC group members were able to find enjoyment in their topic and attracted the whole class's interest:

> *... And at the end they didn't really like it*. They *didn't really* enjoy it, because it was something that I gave as an example, not something they really thought about hard enough for them to grow into that topic. (Sophie, Q 7.8)

7.3.3 The experience of efficacy

All the DMC groups achieved outstanding results exceeding their and others' initial expectations. However, the analysis found that heightened and sustained motivation was probably rendered by a number of factors that facilitated the dynamics of group performance, and a group DMC became possible and successful in part because of facilitative contextual factors and sometimes unique opportunities for success. The themes below present the main parameters the analysis identified.

7.3.3.1 THEME 4: COLLECTIVE GROUP GOAL AND CLEAR EXPECTATIONS

In all the DMC cases, engagement was aimed at a final group goal that featured both clarity and value. For example, although it was new to the students, the booster project had a number of properties that helped the groups to form a clearly-defined goal towards which they channelled their effort. This was achieved first by providing them with a clear set of expectations and necessary guidelines of what exactly they needed to produce. In addition to spending about one hour at the beginning of the task for clarification of assessment criteria, the tutor reported that some of the members contacted her during the weekend mainly in regard to how they needed to produce the final PowerPoint and poster. They were to be assessed on the project content, language (including grammar and vocabulary), delivery, and team-work skills.

The fact that the groups had a pre-defined goal and clear expectations seemed to be useful in directing their collective, focused energy towards the target, and this helped them to be motivated, as Leila (Q 7.2) explains: "… they had a clear task. That was *important because if they didn't know what they were doing, they couldn't* have done it." Knowing what was required from them also helped them with

planning and allocating the roles, as she further explains: "[T]they had to choose a *group leader and allocate the roles for everybody, so roles for IT and for research…* and I think that helped them with motivation because they knew exactly what they were doing." (Leila, Q 7.3)

Although both groups A and B (i.e. Cases 5 and 6) distributed the roles among the group members, they all expected that they would be assessed collectively and that made them all contribute to their collective effort, as Tom (Q 7.2) noted: "Our group members were assessed together. *If I didn't do* my role in a team, our team got lower marks. In other words, not me but all." Therefore, having a shared final aim motivated them and also helped them to develop stronger relationships and work collectively, as Huan stated: "To finish task we have to stay together and have *more chance to know each other…* Everybody have the same aim to win the prize so we are all motivated…." (Q 7.2)

In addition to including clear standards of assessment, the project was seen as relevant to the students with the potential to develop real-life skills. The project was intended to develop the students' content information about a business case, their L2 skills, their team-working and presentation skills. Being such a multidimensional, the project attracted the students' interest. Sami for example attributed his intense motivation to his perception of value in regard to these skills:

> *… I always learnt about team*-working skills, and all of those skills... This time I had to apply them in the right manner or I *wouldn't do good* at team-working. So it gave me the opportunity to apply whatever skills I had, in any ways I wanted. (Sami, Q 7.4)

Also, the project was designed so it could maintain a balance between its challenges and the students' skills. Huan for example said that the "difficulty of this

task is appropriate" (Q 7.3); this balance brought a sense of collective joy and confidence based upon their perceived progress: "It was really hard, tired. But we *enjoyed that moment…* Every member felt that we made great thing and had confidence." (Huan, Q 7.4) Although challenging, the project allowed for generating interest and creativity as Huan (Q 7.5) reported: "The process to create poster is interesting and utilising creativity, is fun especially when you have a good idea."

7.3.3.2 THEME 5: AUTONOMY

In all the cases, autonomy emerged as one of the most dominant themes in the dataset, not only as descriptive of the group DMCs, but also a major reason for their success. For example, in Jason's case of a Thai class, the students were provided with a unique possibility for autonomy that seemed to be rare in the Thai educational system of the 1980s. Therefore, Jason encouraged the students to seize the opportunity and the autonomy that unexpectedly became available to them:

> *… Then, at the request to me from the class,* we stopped doing the required curriculum. Instead they wanted to write, produce, direct, and film their own short movies. They divided into groups and took on different tasks to do this. (Jason, Q 7.2)

Jason's class had a unique opportunity to be different, to be free from the required curriculum, and to be able to do what they chose to do. They therefore exploited the autonomy to work independently and in smaller groups of their choosing towards their goal.

In the booster activity, once the groups were provided with details of the activity and its assessment criteria, they were left to work on their own, as Leila (Q 7.4) explains: "So they had to work together on their own with no help from us really

ap*art from the initial, first half an hour of guidance… So it was quite autonomous in* that way."

This sense of autonomy helped the students to feel that they own the project and thus to exert effort to produce an "appealing" final outcome, as Huan (Q 7.6) said: "My interest is designing the poster to make it more appealing. It is something you have genius freedom to do what you want…."

Autonomy also helped the groups to depend on their members and make use of their skills. In return, the group members seemed to have been motivated by this opportunity for autonomy as it gave them the possibility to test and display their personal skills, as Sami (Q 7.5) reflected: "*I felt more cleverer let's say*, because actually I was given the opportunity to do whatever I want."

7.3.3.3 THEME 6: INSPIRING GROUP LEADER

In the majority of the group DMC cases, the motivational role of a charismatic and inspiring group leader emerged as a dominant theme. In Jason's class of Thai students, for example, a group leader played a central role in motivating the whole class:

> One student was central. She was very charismatic and certainly got students to interact in English. But, I think she did this by letting the class know the textbook was a little boring. I recall that she even yawned in class. Perhaps her laughter also prompted students to relax more. (Jason, Q 7.3)

Although none of the groups were assigned a group leader externally (e.g. by teacher), certain characteristics were identified in helping an individual member to acquire the leadership role, most importantly age, as Jason explains:

> *She was a year or more older than the other students… Like in* many university settings in Asia, age plays a part in how people behave. Older people become class leaders in some ways by default. (Jason, Q 7.4)

Despite the significance given to older individuals in the Thai cultural norms, maturity was also a factor in selecting a leader among the other group DMCs. Furthermore, having more academic credentials was essential in helping the only student with a PhD in Sophie's group to become a naturally-occurring leader. However, Sophie's group members were initially struggling in part because their group leader was still unconvinced of the value of the project. However, once he endorsed the project, he seemed to have pushed the whole group into a powerful DMC:

> [H]*e didn't really want to sit there… So I could see it from his* face what he was thinking, literally. But after the first two sessions, I think I gained his respect, like kind of. (Sophie, Q 7.9)

As can be seen from the extract above, motivating one student who naturally appeared as the group leader was a major factor in not only helping him integrate into the group, but more importantly to embrace the project and then help motivate the whole group.

In the booster activity, the groups were asked to choose their own leaders who were in charge of managing the groups and representing them in the final presentations. In these two groups, having a group leader seemed to be important in organising them, in ensuring that they maintained a steady level of motivation, and that they all contributed to the project, as Tom explained his leadership role:

> *I checked time, each member*'s task and progress of our job. Being a leader itself made me more involved in that project… I took full responsibility of our project. Not to fail the project, I checked everything in my group. And when someone task was beyond or below my expectation, I helped that member and reallocated our tasks to do our project efficiently. (Q 7.3)

As such, the group leader was a central element in directing the group energy, checking their progress and ensuring efficiency. Noticeably, being a leader itself was motivating for Tom as it made him feel more responsible.

For group A, Sami was the leader who saw his role as the "think-tank" of the group providing guidance and checking their progress: "every time they would face a problem I would be there and give them the solution." (Sami, Q 7.6)

In the booster project, age was also a major criterion for becoming a group leader, but also experience and gender. Tom for example was naturally seen as a group leader due to his age and experience, as Leila (Q 7.5) narrates: "There was a guy, and the rest were younger… *They called him uncle*… He was experienced. He was the only one doing an MBA and had work experience and stuff." As for Sami, despite that he was the only Middle-Eastern and the rest were East-Asians, he thought he had become a leader as he was the only male member and that made him a natural candidate to be the group leader. However, he seemed to have assigned some of his roles to another official leader he nominated; given the differences in cultural background and gender, he probably did not feel comfortable contacting all the other members, especially because they had not known each other well before:

> That [being the only male] made me a leader and I would make all the decisions, and we had an official leader, I assigned a leader for the team who would sometimes talk to each one and combine the ideas…. (Sami, Q 7.7)

7.3.3.4 THEME 7: SUPPORTIVE TEACHER

Except for Sahar and her classmates (Case 1) who pursued their L2 learning independent from any institutionalised regulation or support, the unique role of cooperative teachers across all the DMC cases was apparent—although the role of teacher was not originally a central part of the research agenda. In the cases narrated by the teachers, the data indicated that the teachers seemed to have played an unusual role while their students were experiencing a group DMC—unusual was defined in the coding manual as divergence from how L2 teachers typically perform their roles. In addition to and perhaps as a result of the autonomy the groups enjoyed (as discussed above), the teachers performed their roles mainly as a consultant or facilitator, rather than a controller or regulator.

In Jason's class, the students first abandoned their required curriculum to the projects the students wanted to do as groups, and Jason then described his role as a consultant: "I acted as a consultant to each group and answered their questions usually only when they asked me, although I did make suggestions from time to time." (Jason, Q 7.5) Playing this role seemed to be helpful in a number of ways: it helped the students to gain autonomy so they could decide what L2 aspects they wanted to improve—for example, they focused on communicative skills rather than what the national curriculum required; it allowed a role for the teacher to provide guidance and suggestions to the students as the students did not always have enough technical knowledge on their own; and as such, it made the students feel assured that they had access to the support they needed. These aspects are clearer from Jason's account:

> I was a facilitator. My job was to make using English easier for them. To do this, we established that I structured the tasks, but I wanted them to have input into the process... *They were bored*

> with the textbook and wanted to do something else. I facilitated *the process and asked them for ideas… they also wanted to do* other things using English and that's when the one student suggested they put on one-fact plays. I facilitated the task by asking them questions, such as what kinds of things do they need to do to put on a play? They answered: write a script, select a *director, audition for roles, create a set… Someone then* suggested to the class that we film the plays…. (Jason, Q 7.6)

As can be deduced from the extract above, in their group DMC, the students were active participants and owners of their own learning, and many of the activities were suggested by the students although they made use of their teacher for guidance and ideas for new activities. This excerpt also suggests that the entire class functioned smoothly and close, sincere, and trustful relationships were developed between the teacher and the students. That in turn helped the students feel comfortable, unthreatened, active, and then happy in that environment. The entire process of such an alteration of the teacher's and students' roles took consecutive steps, becoming more spontaneous and efficient as they progressed further.

One possible reason for this supportive teacher role was that the teachers showed commitment in their teaching. For both Alia and Sophie, the group DMC experiences occurred in the first years of their teaching career, and their enthusiasm might have been an influential parameter. Jason was also a recent graduate in 1980 (time of the DMC event), and his willingness to travel and teach in a foreign country might have stemmed from his passion for teaching English.

In the course of the student DMCs, at least one teacher reported what the analysis identified to be a teacher DMC. When Sophie started teaching an English presentation course to adult learners, she was already motivated, but as one of the groups performed beyond her expectations and became a DMC, her motivation also increased: "I was already *quite interested in teaching… But as the group becomes*

more motivated, I also… I got excited *as well…*." (Sophie, Q 7.10) As a result, Sophie found the impetus to prepare more materials for this motivated group and even invited them to a church that she was attending: "… [T]hey are really keen to learn, so I am preparing more for them. So, also I remember taking two of them… [to] discussion groups that are held in church…." (Sophie, Q 7.11)

As the DMC group expended much effort and differed from the rest of the students not only in their motivation and interest, but also in how they responded to the group project, the DMC group aimed for learning and acquiring the skills the project intended to teach—rather than focusing on grades. This assessment from Sophie also contributed to her motivation as a teacher:

> *I really enjoy it… partly, a lot really because of this particular group really, truly, because they were so good… I know that other groups are not as great…* but I somehow could get over those and not focus on tha*t… but this particular group is slightly* different. They are not just focusing on the grades, they just want to do well. (Sophie, Q 7.12)

Because of having such a group, Sophie was led to not focus on other not-so-motivated groups of students and thus to not lose interest in teaching them.

Furthermore, Sophie's perception about teaching seemed to have slightly altered as a result. Teaching was now seen as fun and not merely a form of employment, and therefore she looked forward to times of teaching: "I remember going to work and thinking to myself, I am not doing this for money*… I am just really* looking forward to teaching because it is fun." (Sophie, Q 7.13)

In return, it seemed that the students that experienced a group DMC were capable of taking advantage of their supportive teachers and their increased enthusiasm for teaching. When Sophie invited her students to English practice

sessions offered by a church, a few students from the DMC group attended these meetings. Jason's students also benefitted from the passionate teacher and took the initiative to only use English while in class:

> In class we started the semester [all] kinds of speaking activities. But, something clicked with the students. They wanted more... Unlike with most English classes, the students used English to *do the task at hand… at the suggestion of this one student and* my enthusiastic support, to always speak English in the class. (Jason, Q 7.7)

7.3.3.5 THEME 8: FUNCTIONING GROUPS

All the groups that had experienced a DMC were seen as functioning and efficient. However, the groups had to go through a number of processes to gain this status. As discussed in Theme 3, entering into a DMC was not an immediate leap. One mechanism by which group maturity was achieved was group consensus after a relatively lengthy process of negotiations among the group members. Although reaching consensus seemed to be important so the groups could choose a topic that functioned as a shared goal, resolving group differences and conflicts was a more significant issue for the initial stages of group formation. As exemplified in Sophie's group, major disputes and differences in thinking initially emerged among the group members, and as soon as these differences—which signified deeper conflicts—were resolved, the group made a shift into becoming more mature and cohesive.

In the booster activity DMCs, the groups were seen as highly functioning organisations. Although the students did not have the autonomy to choose their group members, both groups developed strong relationships among the members and obtained group cohesion. However, they initially witnessed group conflict—at least for one group. Group B witnessed conflict due to differences in opinion, as Tom (Q

7.4) narrated: "We had some crisis and hard time because some had different point of view about projects... Also I emphasised that we are one team and get same mark. So everyone involved and motivated to get better mark." Noticeably, the group leader and the rest of the group were willing and cooperative in resolving their differences through spreading the one-group-one-destiny spirit.

Whereas overcoming initial member conflicts and having capable leaders and tutor support were important in reaching group cohesion, the use of an effective group structure was the key in this regard which included an adequate process of assigning roles and responsibilities among group members. Role distribution seemed to be a first major step once the initial difficulties were overcome and the group DMCs were launched, as Jason explains: "... They divided into groups and took on different tasks to do this. Some took on several tasks – writing, acting, filming (eight *millimeter at the time...)*." (Jason, Q 7.8)

As a result of an agreed-upon mechanism for distributing roles, all or most of the group members exhibited effort and willingness to do well. Students in Sophie's DMC group that excelled among the others, for example, were seen as active members who all or most of them proactively contributed to the project:

> ... [M]ost of the members of this group would be an active member in contributing to the presentation. I remember one girl particularly was very *quiet... But the other four people were* very active. They were really trying to do well. (Sophie, Q 7.14)

It is worth noting here that although one group member appeared as "quiet", that does not imply she was passive. Although Sophie could not make an objective evaluation of this girl's contribution—mainly because most of the group work was conducted outside of class (as I will report below) and she was not available for contact—her quietness did not seem to imply passiveness. Indeed, it might contrarily

suggest that their functioning group organisation made it possible even for introvert individuals to make a substantial contribution—evident in their excellence as a group.

7.3.3.6 THEME 9: ACCOMMODATING STRUCTURE

Soon after their DMCs and starting with choosing and agreeing on a project topic and assigning roles and responsibilities, all the groups utilised a salient group structure characterised by systematism and efficacy. Although of the seven group cases considered here, five of them were to various extents assigned projects or programmes to follow, the final and detailed decisions about what to use as a structure were made autonomously by the groups. For example when Sophie assigned projects and provided the groups with guidelines about how to prepare, she gave her students the opportunity to select their own topics and proceed in their own choosing.

Regardless of the degree of autonomy the groups enjoyed, all the DMC groups were found to be making effort collectively to search for the best possible plan of action. The groups also sought guidance on how-to-do aspects of their projects, as Sophie for example explains: "They were also asking me how to do research*, because they didn't know how to use the libra*ry, online system, whatever, *but once they know how to do it….*" (Sophie, Q 7.15)

The data suggested that this initial period of examining and discovering how to proceed with a plan to achieve the groups' final goal witnessed a kind of tense feelings from some members in regard to unclear expectations and a certain degree of uncertainty about the groups' perceived control over the tasks, as Sophie further

explains: “They were a bit frustrated. They were still trying to find out what are the guidelines, what are the expectations.” (Sophie, Q 7.16)

Whereas the groups initially relied on their teachers for guidance to understand the task expectations, they mainly resorted to one another to put together a finalised structure on which all the members agreed—no member conflict was reported after the groups adopted a certain structure. Furthermore, working on the projects was not restricted to following specific recommendations from the teachers; rather, all the groups worked out a highly-structured plan that included how, when and where to study together.

In the case of the booster project, the data showed that both groups A and B were successful in generating effective mechanisms for their operation which played a great role not only in achieving their goal, but also in thwarting tensions and increasing cooperation. As the entire task was to be carried out by the groups, independent from any external support, the groups felt responsible and even pushed to generate their own group-work structure, as Sami (Q 7.8) explains: “We had to set the timetable and we had to manage the time, we had to do everything.” However, their structural choice seemed to be based on meeting all the members’ circumstances:

> [W]e thought about working in the library, but the library would *close on Monday, but Janna, one of the team members, said ‘I have six chairs in my kitchen in my flat’.* And we were all friends with Janna. And she was also open and easy-going person, so *she also said she would cook for us, on the first day…* (Sami, Q 7.9).

Thus, as everyone knew Janna before, they felt comfortable to gather and study in her kitchen. Having decided on the main structure, on the first day of their meeting

they allocated the roles and duties based on each member's skills: "On the first meeting, we distrusted the roles and fixed a timetable*... so we all knew each other's* skills, and we kne*w how to find everyone's skills.*" (Sami, Q 7.10)

This stage seemed to be crucial because, as Sami said, they managed to find an effective ground for group operation in which they discovered each other's skills and utilised them efficiently. Therefore, in addition to its organisational role, a suitable structure helped the group members to develop group cooperation through acquaintance and intimacy, as Leila (Q 7.6) reflects:

> So they needed a space to meet up, so I guess it helped them to bond as well as a group, they got to know each other in a very short period of time. They were quite different characters, they *didn't necessarily talk to each other in the class*.

Here, it seemed that closer relationships among the members were only fully developed when they were working collectively on this project, but not while in class. Whereas having a shared destiny and the social joy of working in groups were two factors as mentioned earlier, another main reason for such group cohesion was the equal distribution of roles which helped them feel that every member was making a contribution, as Sami (Q 7.11) indicated:

> The good thing was that everybody was motivated*... some people were motivated but they didn't show it... like one girl,* her conversation skill was not very good, so we just assigned her to write the scr*ipt... and she was motivated to do it and she* was valuable for the group.

As is clear from Sami's account, all the members' contributions were seen as valuable which seemed to have helped to reduce some of the common side-effects of

group work such as envy and negative attitudes towards one another. It also made them feel their individual effort mattered and added to their group project.

This group structure seemed to have been significant in creating a smooth, non-competitive atmosphere. Sami (Q 7.12) identified this supportive atmosphere as one of the reasons for their efficient operation: "*... So it was new and we were* working in a kitchen, we just cook and continue working... It was like a very easy environment for working". Thus, their choice of working in a kitchen provided them with an informal, easy and friendly group environment in which cooking and dining together was an important component. This and the other factors mentioned above led the members to feel at ease around one another and to find the group environment enjoyable insomuch that they looked forward to their time together and they made it their priority during these three days, as Sami (Q 7.13) illustrates:

> [T]*his would never happen again, this thing… we enjoyed our* time being together working as a team, so we liked to get together again, we just liked the environment and just wanted to repeat the feeling again, do you know what I mean?

7.3.3.6.1 Going beyond the classroom boundaries

In addition to working independently, the groups also developed a structure that allowed for practice outside of the classroom setting. This seemed to indicate the level of commitment from the group members, but also a strong tendency to personalise their projects. The booster project groups was entirely based on working outside the classroom and the groups successfully managed to find a suitable place as discussed above. In Sophie's DMC group, the students met and worked on their projects outside of class and considered the classroom time and space mainly as continuation of their discussion:

> Interviewer: … How did you notice that they were super motivated?
> Sophie: You could see it. You could sense it, because every *lesson they were given time to discuss… this particular* group was there ready to gage in, they already were talking about it outside class, they come back in and continuing that conversation, that discussion. (Sophie, Q 7.17)

As can be seen from this extract, a major sign by which Sophie recognised this particular group's unusual motivation and commitment was their meetings outside of class.

7.3.3.6.2 Group DMC routines

In addition to meeting together outside of class, the DMC groups developed a systematic structure for collective task execution on a regular basis, which had become behavioural routines upon repeated occurrences.

In Sahar's group of five classmates who all shared their interest in learning Japanese, regular meetings became a major component of their studying structure through which, not only did they review what they had studied, but they also spent quality social times together:

> [W]e had one day in the week where we all could have lunch together. So that was the day we met to discuss and read a bit of the new chapter in the language book. So I sometimes crammed the day before to make sure I learn everything needed for that day. (Sahar, Q 7.1)

Here, these regular meetings seemed to have been beneficial in two main ways: As a social occasion for strengthening relationships among the group members, and also and perhaps more importantly, in providing a structural system through which

members felt they needed to prepare and perform their share of responsibility—regardless of whether at the time they were individually motivated or not.

The data revealed that whereas regular meetings could be held from the early stages of a group DMC, developing established routines needed a considerable amount of time to occur. They seemed to form only when an actual group DMC had settled and set on a clear path toward the final goal. As mentioned in Chapter 5 (see Theme 12), Sahar's group had started with a random programme for learning but then developed the routine of meeting once every week; yet, this took the group a whole term to become an established routine:

> Interviewer: Were these routines developed from beginning or throughout the experience?
> Sahar: Later I think, because at first it was just random phrases picked up from anime, and not a fixed time just whenever we chatted. Then when we had the textbook it became a bit more organized because it was a plan we could follow. And we could set up the weekly meeting.
> Interviewer: And how long did it take you to develop language learning routines in that experience?
> Sahar: Quite a few months I think, maybe a whole term before we had that book. So we just learned random phrases for fun and then it became a more serious thing. (Sahar, Q 7.2)

As noticed here, learning was only perceived as "more serious" when study group meetings became routinized. Despite that their routine of meeting once a week took a while to develop and establish, this became an important structural component in their experience. It seemed that until that point in their experience, they did not have a clear perception of progress towards their learning goal as they were learning "random phrases for fun". However, meeting once a week provided an effective framework that made them take their learning more seriously, and it helped them become "more organised" and obtain a clear picture of where they were going.

Moreover, this routine of getting together also seemed to function as a social occasion on which they all had lunch together which boosted their motivation afresh.

Additionally, these regular meetings seemed to be playing an even more important role which was providing a structural framework through which everyone felt they needed to do their part beforehand. Instead of developing "fixed" personal study routines on her own, Sahar depended on their group routine of weekly meetings to ensure she was making progress, and thus she maintained her steady effort.

Jason's class were also able to develop group routines which seemed to be central to maintaining their motivational momentum, as Jason reports:

> Some of the routines they de*veloped… were:*
> * Immediately switching to English when they entered class.
> * Starting the class right away without me asking them to do this...
> * Raising hand or calling me if they had a question about English use or something else. They knew I would not correct them unless they asked. (Jason, Q 7.9)

Interestingly, although Jason's students were from an East-Asian culture in which students might have played a less active role especially at that time (1980), it is evident how this class developed routines on their own and how these routines provided them with an unprecedented degree of autonomy. This excerpt also implies how the class atmosphere turned into a DMC-generating environment mainly because all the students were committed to these routines and that helped them perform efficiently; for example, they switched to English by simply entering the class and started "the class right away".

Thus, regular points of meeting had become an important and integrative part of the group experiences, and functioned to provide direction, assurance of progress, social wellbeing, and a social sense of accountability to carry out assigned tasks.

7.3.3.6.3 Teacher and group-generated feedback

Throughout the group DMC cases, two main sources of feedback were identified: teacher feedback and group feedback. Teacher feedback was of less frequency and dominance. The teachers helped the groups at the initial stages of project assignment when they explained the tasks, gave them guidelines and illustrated teacher expectations. During the process of engagement in the projects, the teachers provided some feedback, but mainly positive feedback. Jason, for example, encouraged the students and made himself available for any questions; yet, unlike other teachers the students had, he maintained a positive feedback attitude and intervened only when the students asked for help:

> I encouraged students to speak. I whole heartedly encouraged students to speak: *'There are no mistakes!' 'Ask me if you want* to know how to say something or you want me to correct your English*.' I think my attitude was different from many of the students'* previous teachers. They corrected students even when the students didn't want to be corrected or the correction embarrassed them. (Jason, Q 7.10)

This approach helped the students to avoid feelings of teacher pressure or embarrassment.

Importantly, teacher feedback appeared to be mostly directed at helping students to improve and build on their strengths, and thus making their progress visible, as Sophie explains: "... I would tell them what strength they have for each individual learner, and how they could improve. For some, they may have to speak

louder… or use the tone….” (Q 7.18) As such, teacher feedback provided assurance and affirmation which the students could utilise to maintain their momentum and make further gains: “So there were some activities I could say, *‘*okay you need this, *do this, do that’*, or just oral feedback, just saying, actually, *that’*s really good….” (Sophie, Q 7.19)

Despite the dominance of positive teacher feedback, the group DMC Alia’s students experienced included negative feedback, and the whole DMC experience started with a negative feedback exercise which served as an awakening tool, as discussed earlier. Later, she continued using the exercise: “... [A]fterwards, we gave them assignments every week, and we did the same feedback. Noticeably, we had less and less errors that were present in the first assignment.” (Alia, Q 7.4) After the initial “shock tactic” as Alia called it, she probably felt she needed to continue on the same exercise because it had worked to awaken them and led to their group DMC, and also because the whole DMC was based on this particular structure. However, in addition to making all the selected essays “anonymous” which helped in making the exercise appear less negative, more positive feedback was seen in the later exercises as the students became more interested in the process: “I definitely had a bit more participation [from the students]*... And it really helped when they gave their own* ideas, and that would actually make them more interested in writing whatever I gave them to write.” (Alia, Q 7.5)

Moreover, through proposing topics and sentences for the essays, the students became “interested” and positive about the whole experience. As this happened gradually, it seemed that in the subsequent weeks, Alia only played a neutral or supportive role in providing opportunities for the students to do the correction and improve the essays: “... [T]hey would point out what could be corrected, what could

be written in a different way, and that way we wrote the essay together." (Alia, Q 7.6)

In all the group DMC cases, most of the feedback originated from and was provided by the group members themselves. In the cases narrated by the teachers, student feedback did not receive much emphasis, possibly because the teachers were unaware of details of how the groups worked together. Yet, in some cases the teachers had an idea of how the students provided support to one another. In Jason's class, for example, one student made a suggestion to always speak in English which all the classmates accepted. Furthermore, the students started asking one another questions in English:

> ... [A]t the suggestion of this one student and my enthusiastic support, to always speak English in the class. They held to the promise, and this led to students asking other students questions in English, as well as having complete spontaneous conversations in English. (Jason, Q 7.11)

In the case of Sahar and her friends, student feedback emerged as a clearer pattern. Not only did the group become the main source of correction, they also encouraged one another when one of them made progress. They also sat together and made collective attempts to learn a particular task:

> *... If I said something that is pronounced differently...* then my friends would try to correct me and I learn from them. So in a *way, we provided feedback for each other, like '*oh you said that perfectly*, you sounded exactly like that person', or we would* just sit together and try to decode texts and try to figure out how to read it. (Sahar, Q 7.3)

7.3.3.7 THEME 10: ENJOYMENT

Positive emotionality emerged as a dominant theme in all the group DMC cases, with almost no instances—except for initial member conflicts—of reported negative affect. All the teachers and group members described the experiences as positive and enjoyable. Jason, for example, described the whole experience in terms of enjoyment which seemed to be more central than the students' goal of being "fluent in English":

> Most students wanted to be more fluent in English. At least this is what they told me. So, they got excited when they were given chances to express their opinions or even simple everyday talk. However, I think the biggest impact was simply being happy. (Jason, Q 7.12)

Here, it appears that enjoyment was a more powerful motivating force for engagement than a group L2 goal. This is based on two indications: First, whereas "most" of the students had an L2 goal, it seemed that all or the majority of the students outweighed enjoyment to the goal, suggesting that enjoyment—not an L2 goal—might have energised a larger number of students once they were part of a group. Secondly, enjoyment was "the biggest impact", suggesting that enjoyment was more powerful than an L2 goal to motivate the class.

Enjoyment seemed to be a powerful motivating drive for group members who did not immediately embrace an L2 goal. I already reported the struggle the leader of the group in Sophie's class was experiencing at the initial stages of the group formation as he was not convinced of the meaning of the group project. Later, however, as he formed a close friendship with the other group members, he started enjoying the group and that in part motivated him: "... [H]e enjoyed the group, like he got some new friends…." (Sophie, Q 7.20)

In another group DMC-like case (which was not considered as a case because of insufficient data due to different data collection focus) where Hisham (a teacher in a rural elementary school in Kurdistan) taught young pupils who did not particularly have a mature L2 goal, the students seemed to be motivated primarily by enjoyment:

> Because they were still at the primary school, they might have not had any clear goal, and it would have perhaps been alright *if they didn't kn*ow any language, but *they enjoyed the teacher's* encouragement*, and were happy when the teacher liked them….* (Hisham, Q 7.1)

In all the group DMC cases studied here, enjoyment due to a sense of belonging and being part of a group appeared as a main source of individual motivation within groups. Enjoyment however was not due to the perception of simply belonging to a group, but mostly because of developing strong group relationships and functioning group dynamics. Moreover, enjoyment was more about building functioning groups than engagement in the group activities per se, as will be illustrated in the following subthemes.

7.3.3.7.1 Group dynamics

All the group DMCs had a central characteristic in common: the dominance of group cohesiveness. Nevertheless, most of the groups did witness group conflicts especially at the initial stages of the group life. Sophie for example discussed how her DMC group became extremely cohesive but only after resolving the initial member disputes and disagreements. This only happened gradually: "*... But* after a few sessions, I could see that the group gradually became more cohesive*... Part of it, I* think, because they developed friendship among themselves. So they liked each other." (Sophie, Q 7.21)

As discussed in Theme 2, reaching consensus over a topic and the role of each member was vital for forming functioning and cohesive groups. Later, the groups managed to create a friendly and supportive atmosphere in which they provided support and encouragement to one another, as Sophie explains: "And also they were very supportive to each other, they would help each other, they would practice" and this encouragement helped them overcome the challenges of the task, "*... they don't find it easy, but* they kind of encouraged one another to practice." (Sophie, Q 7.22 & 23)

As a consequence of developing such a socially-supportive environment, Sophie's DMC group achieved what they might not have expected and this generated a sense of achievement:

> ... [Y]ou could see a sense of achievement. They were really *happy, when they got through it... It was really worked out,* it *wasn't just like a project. They'd gone beyond what they were* expected to do. So, yeah. (Sophie, Q 7.24)

Importantly, the students' performance in this particular project was not similar to any group project, but exceeded what might characterise a good project.

A shared sense of pride in outstanding achievements was a dominant theme implying a collective sense of happiness and reflecting group cohesiveness and close social bonds. In the DMC cases, the final moments were especially important and expressive of how the strong ties increased group effort and performance, as Jason explains: "The students enjoyed the experience so much and were so proud of their accomplishments that they decided to invite their friends and the faculty to view the films." (Jason, Q 7.13)

7.3.3.7.2 Group identity

The feeling of enjoyment and pride was not only associated with achievement, but more so with how the groups developed a newly-formed identity shared among all the group members. Sahar and her friends, for example, became close peers based on their common interest in Japanese. As such, this shared interest dominated their gatherings which extended beyond merely practicing the language. They even watched Japanese movies and cooked Japanese food together: "It was a group motivated kind of exercises and activities, because every time we would meet somewhere, it was to do either Japanese or to watch a Japanese movie, or maybe try to cook Japanese food…." (Sahar, Q 7.4) It seemed that the very reason for the group existence was their passion for Japanese, and in the long run, this interest shaped their relationships by which they were distinguished from other classmates:

> ... [I]t felt like other people were focused more on their future, *their getting married or… things like that, whereas we were more focused on looking at Japanese and thinking Japanese…* we did realise we were quite different because of our hobby and because of this bond we have really. (Sahar, Q 7.5)

7.3.3.8 THEME 11: COMPETITION AND PRIDE

Whereas no intra-group competition was reported, competition with other groups seemed to be a motivational factor for many of the students because it gave them the opportunity to share their pride with others. For Huan, competition was seen as the main motivating force which the booster activity offered and the classroom setting was lacking: "Competition with other groups is the basic motivation for me. In general class *the 'competition' is not so fierce and serious*." (Huan, Q 7.7)

The booster activity was particularly designed to include the competition element as the groups were required to present their final product in front of all the

students taking the course (around 100 students) in addition to the course director. Therefore, winning the competition was yet another additional motivating force. Winning did not seem to be merely a goal to aim for or simply a set of expectations; it was also and more importantly a way of proving a group's superiority. Therefore, winning the final prize both motivated the members and also brought the members closer to each other. Leila (Q 7.7) explained how competition helped the students' motivation: "Th*ey made them competitive as well, because… at the end there was a* competition for whoever had the highest marks, they would get a prize and in an official assembly. So that probably helped as well."

As previously mentioned, Huan, for example, narrated how winning the prize made the group stay together and develop strong ties: "To finish task we have to stay together and have more chance to know each other… Everybody have the same aim to win the prize so we are all motivated…." (Huan, Q 7.8) As a result, the group members felt happy and proud of their achievement after their presentations. Tom's group had dinner together in which they shared their "feeling and thought about project", and "Every member felt that we made great thing and had confidence." (Tom, Q 7.5)

7.3.3.9 THEME 12: ACTIVITY AS MOTIVATION BOOSTER

The analysis identified that in DMC Cases 5 and 6, the organisation of the booster activity was perhaps contributing to the overall efficacy. Despite the fact that these two groups developed strong and cooperative relationships among their members, the effectiveness and success of the booster activity seemed to be in part related to the nature of the task, rather than the individuals. When I asked Leila what made these two groups different from other groups she had taught, she considered the activity—

not the students per se—to stand out as unique: "*I don't think they were different,* so whoever has done this activity has displayed a level being above their normal in the class." (Leila, Q 7.8)

The student members also discussed the uniqueness of this particular activity. The students mentioned how this activity was different from any other group activity, which suggests that they were all familiar with group work but had not witnessed such intense motivation with other previous group projects. Secondly, the group members did not know one another well before the activity and some had strong differences in opinion, and at least one group witnessed initial group conflicts, which rules out the assumption that these groups had intrinsic efficacy—i.e. being motivated at all times and during other classroom activities. Third, both groups taken for this research seemed to have displayed over and above normal motivational levels during the booster weekend activities.

7.3.4 Timescales and group sizes of group DMCs

The intense motivational experiences the participants reported had occurred within various timeframes and in different group sizes. This section will present these findings.

7.3.4.1 THEME 13: INTERPLAY OF INTENSITY OF ENGAGEMENT AND TIMEFRAMES

The DMC cases presented in this chapter lasted between 4 days to 3 years (see Table 7.2). Despite the large disparity among the cases, duration of a DMC did not seem to be a neutral factor; that is, how long a DMC lasted mattered.

Both Cases 1 and 7 lasted relatively longer than the other cases. In group DMC 7 which occurred in a school, the experience of motivational intensity seemed to have occurred for around two years. Although the experience started slightly after Safeen became the school principal who led the transformation process, the shift in motivation did not occur overnight. It took the school at least several months or perhaps a whole year to go through a gradual change, as Safeen explained: "We gradually made the students feel they also own the school. First, we worked on the good students who were already motivated to learn. We used them first." (Q 7.1) Moreover, the change was initially only apparent with already-motivated students, not all the students. As such, it is fair to assume that the school DMC lasted for around two years.

DMC Case	No of group members	DMC timeframe
1. Sahar and classmates	5	2 years
2. Jason's Thai class	20	1 semester
3. Sophie's project group students of 5	5	1 semester
4. Alia's class	20–25	1 semester
5. Booster weekend activity – Group A	6	3–4 days
6. Booster weekend activity – Group B	6	3–4 days
7. Safeen's evening school	350	2-3 years

Table 7.2: Number of group DMC members and the DMC timeframes

The second long case (i.e. Case 1 of Sahar and her friends) lasted for two years. Although the group had the goal of mastering Japanese, their main drive was to understand media produced in Japanese—shared by all the members. Moreover, although they had developed a blueprint for action including weekly meetings, their intense experience was largely free from external structure. Since they were not controlled by an academic institution or teacher, they did not have to follow deadlines or make certain levels of progress in specified periods. This made their engagement less intense and their progress less dramatic especially in the initial stages of their DMC (i.e. before developing group routines). Furthermore, although their experience was largely based on their bond as a group, there was a previous motive stemming from personal visions of learning Japanese—they all shared the personal goal of learning Japanese prior to their group DMC experience. As a result, each group member benefited from both personal as well as group motivational resources and this in part helped them to maintain engagement for a longer timeframe.

As for the cases that lasted between one to two semesters (Cases 2, 3 and 4), the intensity of engagement seemed to be around two hours of instruction a week and a few more hours of outside-class preparation. In the booster weekend project, although the group DMCs took place within a four-day timeframe, the participants reported that they virtually devoted their whole times to the project, staying at a member's flat for most of the days, working on the project, and even dining together. This extreme level of engagement led them to expend an almost unprecedented amount of effort and later physical exhaustion. The students reported that they made their projects their main priority in that long weekend and avoided other forms of engagement, as Sami (Q 7.14) explained: "And we had four days, nothing to do

except for working on the project, nothing expect this project." Tom's (Q 7.6) group also displayed a similar commitment: "At that time, we spent most of our holiday doing our project together. Making food, eating together, doing task and rehearsing presentation, all moments were really precious and happy time."

The fact that this activity was set to be carried out in a limited, short period of time might have been important to its effectiveness, as Leila (Q 7.9) postulated: "I think the time limit was of help, giving them two or three days training, because they *had a target to reach, so that really pushed them because normally they didn't* display that kind of work". Despite its considerable effectiveness, Leila (Q 7.10) assumed that this activity would only ignite such motivational momentum when it was prescribed for a short timeframe: "I think if you would do that on a daily basis, *you wouldn't be able to maintain that, their motivation, they would burn out*, but it was good for that period of time." Therefore, Leila was nearly certain that extending the project beyond that timeframe would lead to burnout.

7.3.4.2 THEME 14: VARIOUS GROUP SIZES

The size of the DMC groups was between (5 to 350 students) with four cases being five or six members. Since data were not collected from the group members of the bigger groups (Cases 2, 4 and 7), there were some indications in the dataset that larger groups might have experienced a less-intense DMC compared to the small groups.

First, in Alia's students of 20 to 25 students, although Alia was not aware of the group dynamics beyond the classroom, she thought the class did not all work together outside of class. They went to her office only in smaller groups and some of them preferred working on their own:

> Interviewer: Did they ever come to you as a group?
> Alia: I think for moral support, they would come in threes or twos. So they would be from the same class... But yeah in general it seemed that some of them would work together and others would prefer working individually. (Alia, Q 7.7)

Second, in the school DMC experience, the principal reported using some form of disciplining to maintain the motivation of the whole school:

> Problems do exist especially in the case of *these adolescents…* Also, they need to be dealt *with in a more special manner…* They need love, respect and friendship, a sincere friendship not artificial. This method made them feel ashamed not to cooperate. Also, the good students helped with managing the bad ones. So, when we made the majority of the students cooperate, they would make the rebellious ones to either cope or quit school. (Safeen, Q 7.2)

As such, although this DMC was made possible through using soft managing mechanisms, some of the students did not cooperate with the new system and ended up leaving the school.

7.4 Discussion

This findings presented in this chapter support the notion that DMCs can indeed be found with groups whether in small teams or in formal L2 classroom settings. The seven cases studied confirm the occurrence of group DMCs in the form of recognisable motivational surges as theorised by Dörnyei and colleagues (Dörnyei et al., 2014, 2015, 2016). The results however do not only validate but elaborate and expand the group DMC concept, especially thanks to the exploratory approach utilised that resulted in rich and multifaceted data. I discuss the findings in relation to the five research questions that guided this chapter.

7.4.1 What are the phenomenal characteristics of group DMCs?

Despite the existence of differences among the various group DMC cases, a number of commonalities depicted what it was like to be experiencing a group DMC. All the cases were characterised by a uniquely strong wave of motivational intensity as a result of releasing a substantial amount of collective energy and effort leading to outcomes beyond what the groups believed possible.

In all the group DMC cases, students performed beyond their own and teachers' expectations. However, in as far as I learnt from these cases, motivational intensity did not suffer as a result of social loafing (Karau & Williams, 1993) or the free rider effect (Kerr, & Bruun, 1983) which can be dominant in other forms of group performance. On the contrary, at least for some of the participants, being in a group increased their motivation to a higher level than while performing individually. Whereas other forms of group work such as cooperative learning (Dörnyei, 1997; Kohonen, 1992; Oxford, 1997 can—despite their potential benefits—be susceptible to negative side-effects of being in a group that may lead to decreased motivation, a fully-fledged group DMC offers immunity from these flaws and gathers and directs the utmost amount of each member's energy towards a clear group goal.

7.4.2 Group DMC as an efficient form of group performance

The data presented on the circumstances leading to the emergence of the cases suggested that a group DMC could only be possible when a number of prerequisites were present. In the course of the DMCs, motivational maintenance was achieved through several parameters of efficacy such as opportunity for autonomy, supportive

leaders and cooperative teachers. Nonetheless, the major underlying factors and sources of group motivation were group cohesiveness and a facilitative group structure. The other parameters helped mainly in relation to these two factors; for example, autonomy was an important element but its effect was largely to increase group cohesion and urge the groups to develop an effective group structure.

7.4.2.1 Group cohesion

Most of the DMC groups enjoyed strong relationships among the members which played a central role in setting up and maintaining their group motivation. Group cohesion was as much an initial condition for a DMC as a paramount factor in maintaining it; in other words, it was "both a prerequisite for and predictor of increased productivity" (Dörnyei & Kormos, 2000, p. 280). Happiness was experienced perhaps in relation to cohesiveness as a result of a sense of belonging to and becoming part of a supportive and enjoyable social circle of close peers.

The findings suggested that positive emotionality was a major theme in all the group DMC cases, and it was the function of a number of changes that each individual member experienced while part of a functioning group. First, being in the company of others seemed to have been motivating for some individuals, perhaps reflecting their personality traits. Secondly, being in a harmonious group gave the members a new, collective identity (Brewer & Gardner, 1996), different from their individual identities, or even while in the classroom. In the majority of the cases, this new identity led the group members to feel proud of their groups and collective accomplishments and this pushed them to show their pride to others through excelling at their group work. This also led the groups to feel competitive among one

another; that is, there was inter-group competition—but no intra-group competition was reported (Dörnyei & Murphy, 2003).

This sense of belonging to efficient groups might be due to a form of happiness known as social wellbeing (Johnson, Johnson, & Smith, 1998) which was seen as both the result of, and a main reason for the intense group motivation. The findings revealed that, the more cohesive a group was, the more its members became motivated and enthusiastic about their project.

Nevertheless, a DMC group did not automatically acquire such cohesiveness, but mostly after resolving initial conflicts and even clashes. An important means utilised by the DMC groups to resolve these conflicts was assigning a group leader who then had a great role not only in helping the groups to transfer to the DMC mode, but also in becoming a model and a constant source of moral support. Secondly, the groups utilised the use of one-group-one-destiny strategy that seemed to have helped members to reach a new level of relationship based on acceptance (Dörnyei & Murphy, 2003)—a group concept which assumes that group members respect one another based on the fact that they belong to one entity and share one destiny. Consequently, a sense of togetherness became dominant in the DMC groups which perhaps had an impact on reducing some common negative by-products of being in a group such as anxiety, envy, and competitiveness. Thus, being in a group seemed to have become rewarding in its own right, and maintaining group involvement was seen as necessary to continue friendships and social wellbeing.

7.4.2.2 Group structure

Although group cohesion helped the groups to maintain motivation throughout the duration of their DMCs, it and positive emotionality did not seem to be sufficient. To

sustain intense engagement and commitment, the groups needed a salient structure which seemed to be crucial in two major ways: first, to channel the group energy collectively toward a shared goal, and secondly to ensure group engagement even at times when individual motivation was lacking. Therefore, most of the groups managed to develop an agreed-upon structural pathway once they successfully passed the group formation stage (Dörnyei & Murphy, 2003).

In developing a group DMC structure, priority was given to finding a proper mechanism to combine all the individual contributions so that no group members' skills were wasted nor any member would feel his/her contribution did not matter. Moreover, assigning roles and distributing duties was an ongoing process that continued throughout a group project. This also helped the groups to discover and utilise all the group members' skills. Nevertheless, the most significant benefit of a group structure was in its ability to provide the groups with both autonomy yet a compelling mechanism for unremitting engagement, and this was achieved through consistent occurrences of task involvement or habitual routines.

Yet and perhaps specific to group DMCs, the impact of group routines was in conjunction with the effect of positive affect, that is, through combining the effect of positive emotionality with a structural precept—this is probably a novel and uniquely valuable contribution of group DMCs. A group DMC seemed to be capable of attracting individual contribution mainly because the lack of engagement was perceived as leading to a sense of social shame, fear of being left out, or missing the joy of being part of the group (See Sahar, Q 7.1 above). As a result, since all group members were connected to a larger entity, individual members might have found engagement in their group routines too rewarding to abandon and non-engagement too detrimental to commit. Hence, group routines played a role in protecting member

engagement and preventing deviation (Janis, 1982). Also, the members seemed to have accepted to follow group routines without seeking alternatives. This is consistent with organisational research that group routines can become such an integrative part of a group's behaviour insomuch that stopping their occurrence becomes considerably difficult "even when changed circumstances make them inappropriate" (Gersick & Hackman, 1990, p. 68).

7.4.3 Dichotomy between individual and group DMCs

Despite similarities in the major DMC components, there existed differences between the two types of DMCs. First, unlike an individual DMC, the group DMCs were not launched by a powerful triggering stimulus, nor was the process of a DMC launch immediate. Rather, even when the groups were assigned a project, it took them a while to acquire the DMC mode. As the analysis indicated, a number of conditions needed to be fulfilled regardless of whether or not a triggering stimulus was available; among these conditions were the perception of value, endorsement of project, and group consensus. This implies a fundamental difference between individual and group DMCs in relation to what actually triggers them. Whereas an individual DMC might be triggered by a self-concordant goal or a vision (Dörnyei et al., 2014), a group DMC seems to emerge when a number of individuals find themselves as part of a functioning group aiming collectively for a shared goal. Therefore, group maturity was identified as an important prerequisite for the group DMCs.

Secondly, somewhat similar to individual DMCs, a DMC group developed a facilitative structure starting with selecting a topic, assigning roles and division of tasks, developing regular points of meeting, and utilising affirmative feedback and

progress checks. However, a group DMC structure differed from an individual DMC structure in a number of ways. Mainly, reaching a decision about the best structure for working together was a relatively well-researched and worked-out process, and that was to ensure that it suited the group members—which was not the case with individual DMCs (see Chapter 5). Also, it took the groups a while to adopt a group structure due to the time the groups needed to resolve other issues such as group conflict.

The third difference was that affirmative feedback in group DMCs was mainly provided by the groups themselves rather than being solicited. This seemed to be because of two reasons: it was the result of autonomy the groups enjoyed, and also because the groups intentionally desired to depend on their own members for affirmative feedback and other support.

In comparing between the two kinds of DMCs, I believe that a group DMC can even be superior to individual DMCs based on a number of observations: groups can provide an enjoyable working atmosphere that may be motivating on its own, at least for some learners; groups can be the source of affirmative feedback which one needs to continuously solicit in individual DMCs; and as we have seen in this chapter, a group DMC structure may encourage members to prepare and deliver their share even when at times they lose their individual impetus.

7.4.4 Timescales and group sizes of group DMCs

The issue of possible group sizes and timeframes of group DMCs has particular practical implications as L2 teachers need to tailor-make DMC-inducing programmes with specific details on group sizes and project timeframes. Dörnyei et al. (2014) have postulated that three potential timescales of DMCs could be identified: a single

lesson, a term, and a course. However, the findings found support only for the latter two. Despite the occurrence of what seemed to be group flow episodes (as by Case 5), a single-lesson DMC was not found. Theoretically, it is not clear how a single lesson DMC could be different from a group flow (Sawyer, 2006). The duration of a DMC seemed to depend on the goals of the group and intensity of engagement. Therefore, in designing group DMC intervention programmes, this balance needs to be maintained.

Group DMCs can be experienced by small and large student populations. The school-level DMC considered can provide us with important insight into not only how a school DMC can as well be possible, but also how the same main DMC components are found in any typical DMC experience. It can also help educators and teachers learn about the significance and perhaps the mechanism of gathering different characters around a vision they can all find personally relevant and worthwhile. Nonetheless, the findings seem to support preferring implementing DMCs in smaller group targets due to the possibility of motivation losses in big settings.

7.4.5 Pedagogical implications of group DMCs

There are many useful pedagogical lessons we can take away from this chapter especially in regard to how to induce a group DMC experience. Some of the techniques found in the results were providing opportunities for student autonomy, assigning tasks with authentic goals and clear instructions and expectations, and offering affirmative feedback and encouragement. Furthermore, ensuring that groups achieve their highest level of performance and productivity is central, which can be fostered through helping groups reach consensus, creating an unthreatening and

enjoyable classroom atmosphere, encouraging inter-group competition, supporting groups to adopt a functioning structure, and providing all the opportunities for groups to succeed.

On the other hand, seeing a few groups of her students display an exceptionally high level of motivation led one teacher participant, Leila, to postulate that a DMC or a DMC-like group experience could be always generated by simply assigning a group a DMC-generating project activity. Whereas this research was not utilised to reach claims about the validity of this judgement, further research is needed to investigate to what extent an authentic, relevant, autonomous, and specifically-designed project might trigger a group DMC in various settings and learner populations.

7.5 Conclusion

The investigation of seven cases of group performance found support for the occurrence of DMCs when a number of individuals share a clear goal and direct their collective energy leading to heightened motivational levels and surpassing outcomes. Although a group DMC needs the consensus of, and endorsement from all or the majority of group members, the results suggested that intense group engagement is guaranteed through a salient structure that absorbs all members' energy and contribution and drives them to participate even when at times they do not have the individual motivation to do so. Moreover, through group cohesion and sharing a common destiny spirit, a group DMC is capable of producing a uniquely harmonious, supportive, and enjoyable atmosphere in which the desire for continued engagement is greater than the potential detriment caused by distraction or apathy.

Combined, these two factors may explain a great deal of the intense motivational energy and outstanding performance the DMC groups displayed.

Chapter 8: General Discussion and Conclusion

8.1 Introduction

The findings presented in the previous chapters provide, to a great extent, answers to two principal research questions underlying the main aim of this thesis and bring out new insights into many other related aspects. Although each chapter was guided by specific research questions, the whole thesis aimed at addressing two major research queries: first, do DMCs occur as a motivational phenomenon as theorised by Dörnyei and colleagues (e.g. Dörnyei et al., 2014, 2015, 2016)? Secondly, what are the phenomenal properties of the DMC construct—including what makes it different and hence its contribution to the field? Whereas the answer to the first question was obtained somewhat straightforwardly by identifying a number of DMC cases in the data collection stages, the answer to the latter question required a detailed investigation of the experiential properties and motivational processes and sources of the DMC cases studied. Adopting a qualitative research approach to data collection and analysis, this research, I reason, has been successful in answering these two main questions. Furthermore, as one of the pioneering systematic investigations on DMCs, this research expands our understanding of DMCs through empirical findings, contributes to many other areas of L2 motivation research beyond the DMC framework, and offers potentially important theoretical and practical implications.

To start with the issue of validation, the data presented support the occurrence of a motivational phenomenon characterised by what Dörnyei and colleagues have depicted in their seminal theory they termed directed motivational current (Dörnyei et al., 2014). Although measuring the frequency of DMCs was not in the agenda of this thesis, the DMC cases collected for and presented in this research suggest that it might

not be difficult to identify instances of DMCs experienced by both L2 and other learners. The fact that I collected most of my DMC cases in a single month-long visit to my home country, and I later recruited and found similar cases among a small targeted sample of fellow students at my university can perhaps be interpreted to imply that experiences that share the fundamentals of DMCs could probably be commonplace among learners, and that DMC-like phenomena might resonate among learners across different cultures, settings, and age levels.

In addition to the validation of what has been previously proposed, this thesis also generated genuinely original themes on the DMC phenomenon. This was partly due to the employment of rigorous investigation methods. The use of structured and semi-structured qualitative interviews and collecting data at multiple timescales in learner trajectories were particularly helpful in this regard due to the novelty of the DMC construct and the centrality of its temporal nature. Having conceptualised the notion of DMCs as a new and unique experience which nevertheless shares many characteristics with other motivational experiences, in-depth interviews were seen as the best methodological tool to uncover the essence of the phenomenon as lived and experienced by the participants (Buxton, 2011).

In order to present a thorough, yet concise, account of what this research has produced, in the sections below, I discuss the findings in regard to three areas: first, I examine what the empirical results of this thesis tell us about the DMCs, especially in comparison to what we already know from earlier theorisations (e.g. Dörnyei et al., 2014, 2015, 2016; Henry et al., 2015). Second, I present my arguments in regard to what these findings mean to the L2 motivation field and what contributions they make to the existing knowledge. And in the final section, I will briefly discuss the practical implications of the current findings.

8.2 New perspectives on DMCs: expanding the wisdom

The exploratory approach utilised in this research generated new ideas that can expand our understanding of the DMC phenomenon. These main new aspects concerned the DMC's launch, structure, positive emotionality, as well as the role of a final goal.

8.2.1 The DMC launch: a triggering and long-lasting effect

The results showed that simply having a goal did not lead any of the participants to experience a DMC regardless of how valuable that goal was. A DMC launch was primarily triggered by a powerful stimulus; a trigger was vital for generating a specific, mostly L2-related, and clear end point to which the participants' attention was directed to. The first function of the DMC launch was to set the participants to aim for a clearly-defined goal. This goal was different from the previous, mostly general goal almost all the participants previously had. As I discussed in Chapter 5, all the participants had a general goal long prior to their DMCs without being urged to act. This transition from a general, non-motivating goal into developing a specific, L2 goal (DMC goal) was a process associated with a specific event or occasion. The findings illustrated that the participants utilised an event in the service of unblocking the obstacles that had prevented them before from pursuing their goals in a systematic and vigorous manner. For example, in the cases of Louise, Shirin, Kawa, and Omed (see Chapter 5), an arising opportunity enabled them to overcome their previously held perception of fear, inability, and lack of control and hence their DMCs were launched. As such, a stimulus served to trigger a DMC launch through two main functions: transforming a general ambition into a specific L2 vision, and fulfilling the missing conditions needed for a DMC launch. Although earlier theorisations (e.g. Dörnyei et al., 2016) focused on the

role of a trigger, this elaborate explanation of the function of a DMC stimulus is considered new knowledge and an expansion of the current understanding.

In addition to its role in inducing a DMC, a trigger's role did not end there. The results showed that a DMC launch was experienced as result of, or in conjunction with some form of emotional or mental reactions such as a sense of awakening or a feeling of anger or excitement. The influence of these emotional reactions seemed to be long-lasting in that they were repeatedly experienced, and events were interpreted in the light of them throughout the course of the DMCs. When Adam was given the greenlight to study abroad for a PhD, he became excited, an emotion he reported to have experienced continuously throughout his DMC period, especially upon making progress and perceiving achievement (see Adam, Quote 6.3). And when Suzan became angry as her brother and uncle treated her with humiliation and contempt—which led to her DMC—she later reported a sense of being different and superior throughout her DMC. Also, Ali continuously solicited signs of success and pride due to experiencing failure at the time of his job interview. As such, in addition to setting up the whole experience, the DMC launch also functioned to produce a system of experiencing certain emotions on a regular basis throughout the DMC. These experiences seemed to help the participants to make a constant link between their progress in their DMCs and the events and sentiments they had experienced when their DMCs started; the motivational aspect of this link is probably best explained by progress one makes from his/her current self towards his/her ideal self (Dörnyei, 2009a).

8.2.2 The interplay between the DMC structure and DMC failure

Once a DMC was launched, all the participants reported the use of a facilitative yet sophisticated structure of ensuing action which played a crucial role in the continuity of

engagement and sustainability. Thanks, in part, to the utilisation of some longitudinal elements in this investigation, the findings shed light on a number of new and important aspects in regard to when a DMC structure is adopted, what resources are utilised as a structure, criteria used in deploying a certain structure, and how structural properties can lead to motivational maintenance.

Experiencing a DMC launch was found to be insufficient to predict a sustainable DMC. Among the individuals who were followed for a number of months, some of them lost their motivational momentum at some point despite having experienced a successful initial launch. The findings suggest that although a powerful DMC launch urges an individual to adopt a goal-appropriate salient structure, failure to act swiftly may result in what the analysis called the DMC failure. The data backed two major factors for this failure: first, inability to adopt and finalise a salient structure soon after a launch, and second, inability to develop a structure that fits one's personal daily schedule. Somewhat different from previous theorisations (see Dörnyei et al., 2014, 2015), this suggests that a successful launch does not predict a successful DMC, and whereas it may be half of the battle (Dörnyei et al., 2016), the other half remains reliant on other factors related to how the rest of the DMC journey unfolds.

Both Carla and Ezhder (see Chapter 5), who initially displayed high motivational levels, clear visions of where they wanted to reach, and characteristics of a well-established DMC launch, lost their motivational drive in the middle of the path only to survive with self-control measures. Although the analysis attributed their motivational loss to their failure to develop a salient structure with established routines, this can be theoretically explained in light of a defining characteristic of the DMCs in general: Since a DMC is a uniquely powerful burst of motivational energy due to undertaking a personally-valuable agenda, any major interruption (physical, affective,

or mental) in engagement will lead to the abatement and perhaps termination of the blaze. Contrary to Dörnyei et al.'s (2016) assumption that intermittent interruptions are naturally likely in any DMC, this was not the case with the participants when the interval reached a certain length. The only interruption found was in the case of Suzan whose one-week break was caused by external factors (final school exams) despite her insistent attempt to avoid it—evident also in her reported negative emotion as a result of the break (see Suzan, Quote 6.12).

In addition to a strong affective affiliation to their DMCs, the participants also reported a tendency towards uninterrupted physical attachment to DMC tasks. Therefore, not only did they develop behavioural routines, but also, and noticeably, engagement was made to be as frequent as possible: for the majority and even those who led a busy life, DMC activities were performed on a daily basis. This finding implies that rather than whether a form of structure is based on backed-by-research or tried-and-tested learning strategies, what ultimately matters is whether it can generate regular points of engagement (i.e. routines) that suit one's lifestyle. As such, a great deal of efficacy and sustainability of DMCs is attributed to a structure that warrants frequently-recurring episodes of engagement.

In addition to behavioural routines, other aspects of a DMC structure also unveiled another key factor to the efficacy of DMCs. In adopting and developing a structure, the participants exclusively relied on their own reasoning. The results showed that some participants deliberately rejected others' advice (such as a suggestion to use a certain type of learning strategy), and others did not resort to professional L2 courses. Further, although some participants utilised institutionalised enrolment, their DMC structure was not following an institution's tuition programme. Moreover, the participants set their own subgoals and generated their own feedback. Progress was

measured primarily through self-evaluative tools such as comparing one's L2 level to that used by authentic or natural sources (e.g. as used on the radio or TV), being able to understand foreigners, or even reading people's eyes when engaged in a conversation with them (e.g. Ali). Mostly, progress was assessed through "positive self-appraisals" and "solicited and spontaneous" positive feedback (Henry et al., 2015, p. 341-342) rather than against standardised tests for example. These findings suggest that the significance of a sense of ownership in DMCs is perhaps greater than already understood. As such, in addition to the need for providing more opportunities for autonomy, attempts to impose specific learning programmes on L2 learners might be detrimental in the case of a DMC-intervention agenda.

8.2.3 Positive emotionality beyond the task engagement

A salient structure and its behavioural routines were not the only mechanism used to sustain motivation; positive emotionality was an additional, supportive parameter. Although the findings of this thesis are consistent with previous theorisations (e.g. Dörnyei et al., 2015, 2016; Henry et al., 2015) in that a great deal of the positive affect experienced in a DMC is due to eudaimonic happiness (Waterman, 1993) in regard to discovering and developing one's potential and skills, new and significant aspects of the function of positive emotionality on motivated behaviour emerged. Importantly, this thesis has been able to make a contribution to the field through explaining some (although indirect) associations between positive affect and motivated behaviour (Ibrahim, 2016).

The findings indicated that the experience of positive emotionality in DMCs was not restricted to the study times only, but the participants maintained an emotional attachment to their DMCs even when they were not engaged in any learning tasks. And

while engaged in a DMC activity, all their time and effort were not used towards the linguistic acquisition of the L2; rather, part of the engagement time was utilised for self-reflection and other motivation-boosting activities (see Kardo, Quote 5.6). This seemed to be the participants' way of making sense of their newly-discovered world of potential, and thus happiness. The participants described their positive feelings in these periods as unique because happiness was due to witnessing a dramatic transformation towards personal growth and development—not merely mastering a second language. As a result, the participants rated engagement as the most enjoyable undertaking and many of them used their free times for studying. In light of this finding, a DMC can now be conceptualised as an emotionally-obsessive experience. Therefore, as discussed in Chapter 5, the intensity of a DMC might be measured by the degree of mental and affective preoccupation, rather than the duration and aggregate of time spent on the task.

This aspect of experiencing positive affect is new, not only in regard to understanding DMCs, but more broadly in the L2 motivation field and even in motivational psychology. In researching eudaimonic happiness, Alan Waterman (1993, p. 682), for example, used scale items that aimed at measuring participants' happiness only while engaged in the target activity; the items either used "This activity gives me…" or "When I engage in this activity…". Therefore, whereas his study of eudaimonia is only in regard to certain activities, the findings of this thesis included a holistic understanding of positive affect in the participants' experiences of single tasks as well as their long-lasting moods.

8.2.4 Focus on process

Despite the clear role of a salient goal in triggering a DMC (as discussed above), the participants related their experiences, happiness, and pride to the processes they went

through while in a DMC, more than to a final goal. For example, a number of them enthused about how productive, empowered and satisfied they felt (for example see Ali, Quote 6.1, Louise, Quote 6.7, and Suzan, Quote 6.4). Although clear instances of visualisations were reported, the experience of vision did not seem to be always consistent or predominant; in at least one DMC case, envisioning did not take place (see Louise, Quote 6.4). This finding may suggest that a DMC can be experienced without clear or frequent utilisation of envisioning. However, as discussed above, a DMC cannot take place without a goal, nor can it continue in the absence of a salient goal, and a goal is central to inducing and determining the duration of a DMC (see below).

The issue of the reduced mention of a goal in a DMC might be due to three reasons. First, as a result of the overwhelming impact of eudaimonia (as discussed above), one experiences positive affect in relation to the current moment more than due to progress towards a final goal. Second, since DMCs are extended forms of engagement, one's focus is primarily directed at short-term targets (i.e. subgoals). Third, a DMC goal (defined as a clear, L2-specific end point such as being able to answer interview questions in English) is not the whole component of the general goal (defined as a pre-DMC goal such as being able to grow one's potential through working at an international organisation; see Chapter 5). Therefore, whereas a DMC goal plays mainly a mechanical or procedural role, one's perception of learning and productivity on a daily basis is more relevant to one's final general goal than say how many L2 words one has learnt. As such, the participants' focus on the DMC process is nonetheless closely related to their goals.

This implication can further explain the lack of "explicitly defined" long-term goals in Henry et al.'s (2015, p. 342) study of three immigrant women to Sweden. Rather than associating the issue with "the specific situations of these women", it can be

interpreted in light of the very essence of the DMCs: although entirely goal-governed undertakings, DMCs are not simply success in making progress toward a goal. In a DMC, a final goal induces, directs, and dictates the entire DMC cycle, yet its impact is mainly in the background due to the overwhelming and unique experience of being in a DMC process.

8.3 Theoretical implications: DMC as more than a phenomenon

With so many theories and models both in mainstream psychology and L2 motivation, why do we need a new motivational concept? Whereas Dörnyei and colleagues (e.g. Dörnyei et al., 2014, 2016) justify the DMC construct in terms of the lack of previous models that explain the DMC phenomenon as an intense yet sustainable long-term motivational experience, in addition to supporting this rationale, the research presented in this thesis suggests that investigating DMC cases can unveil a great deal about a number of other motivational and affective processes. This lies in great part in the uniqueness of the construct as well as its congruence with many major theories of motivation (see Chapter 3). In that sense, the DMC presents both a new theory and also a combination of different existing motivational concepts in a unified model. For example, positive emotional loading, which is a main component of any DMC experience, helps us to understand how emotionality influences motivated behaviour outside of the DMC context.

The cases this thesis studied help the DMC research to understand how the DMC makes use of a variety of psychological mechanisms. Such research also makes it possible to examine the operation of a number of motivational processes in a unified context, which might not be so productive if studied in isolation; for example, through studying the DMC structure, we learn about the roles and functions of behavioural

routines. Below, I discuss briefly some of the main research areas to which the study of DMCs and particularly this thesis contribute.

8.3.1 Long-term motivation

The DMC cases studied throughout this thesis all confirmed a defining feature of DMCs that they are long-term motivational surges. In addition to supporting earlier theoretical (e.g. Dörnyei et al., 2015, 2016) and empirical (e.g. Henry et al., 2015) works depicting DMCs as an extended form of engagement, the findings of this research bring new insights into the issue of sustainability and motivational maintenance. As for the individual DMCs, the shortest DMC was 3 months and the longest was 4–5 years, three cases lasted 1.5 years, four cases lasted for 2 years, and one case lasted for 5 months, with the average of 534 days. As for the group DMCs, the shortest was 3–4 days and the longest was 3 years, with the average of 330 days. Although these findings put the average DMC perhaps longer than expected, they clearly back the notion that DMCs are powerful enough to last for a long period of time without the risk of motivational loss.

A holistic view of the findings suggests that a DMC goal (i.e. the time/effort required for goal-attainment) is the central factor in determining a DMC's longevity. Whereas an L2-domain DMC (versus DMCs in pursuit of other goals) might last longer since mastering an L2 (or an aspect of it) usually takes a long period of time, it is a DMC-specific goal that dictates the duration, rather than the ultimate goal of mastering an L2. For example, when Ali attained his DMC goal of succeeding at a job interview in English, his DMC ended although he still believed his English was at an "intermediate" level and needed further upgrading. Indeed, the majority of the participants desired further L2 improvement beyond their current proficiency at the time of DMC goal attainment. However, a DMC wave did not continue beyond the goal attainment, except

for one case; although Suzan reached her original goal in six months, her DMC continued for two years. As discussed in Chapter 5, this was due to a significant shift in goal setting: Suzan's goal of being able to understand her brother and uncle, who spoke in English, later changed to maintaining her position as the best student in her class. On the other hand, Sahar's DMC ended prematurely when her perception of the goal value had changed (see Chapter 5). These findings suggest that once a DMC passes the launch and overcomes the risk of initial failure, its duration is determined by the DMC goal irrespective of one's acquired L2 competence.

Regardless of how long the DMCs lasted, they all succeeded in keeping their motivational burst for the entire DMC cycles—except for the two failed DMC cases of Ezhder and Carla. These two cases failed at the initial stages of their course (within around 3 months). As such, we might assume that the effect of a DMC launch can only last for the fist few months of its occurrence. Beyond this and in order to keep the momentum, a DMC needs a self-supporting mechanism for energy renewal.

The findings suggested that renewable motivational energy in DMCs is not brought about by a single factor, but as a result of a number of interrelated and supplementary processes. Whereas all the DMCs were triggered by directing focus to a final vision, once in a DMC, the participants utilised transient strategies to energise engagement independent from a final goal. Among these strategies were setting short-term goals and interpreting positive feedback as a sign of meaningful progress and success. However, what seemed to be responsible for long-term motivational maintenance was a unique framework in which learning became routinized and engagement acted as a source of eudaimonic happiness and productivity. Therefore, the participants maintained engagement in DMC activities without the need for volitional control strategies because of two reasons: fist, since a final vision was in effect, a

cognitive intention-formation was now dispensable at the task execution level. Secondly, engagement was seen valuable regardless of whether it contributed to a final goal (i.e. the value of engagement did not always depend on its association with a final goal).

Although more empirical investigation is needed on the motivational processes by which sustainability is achieved in DMCs, this pioneering research is of considerable significance. Research on temporal aspects of motivation is surprisingly scarce (Dörnyei, 2000; S. Ryan & Dörnyei, 2013), and although the concepts of commitment or persistence have been circulating in the literature for some time, motivation theories mainly linked these concepts to the need for goal value and self-control strategies. Latham and Locke (1991) for example define commitment as "the degree to which the individual is attached to the goal, considers it significant or important, is determined to reach it, and keeps it in the face of setbacks and obstacles" (p. 217). However, robust research suggests that positive goal attitude does not necessarily lead to behavioural outcomes (La Pierre, 1934; Wicker, 1969) and the congruence between cognition and behaviour is disappointingly low (Kuhl, 1982; Kuhl & Beckmann, 1985). Also, although self-regulatory and self-control strategies might be effective, they are susceptible to the risk of failure (Baumeister, & Heatherton, 1996; Baumeister et al., 1994) and thus motivational loss in the long run. In the face of self-regulation failure and the burden of self-control, the concept of DMCs offers an alternative approach to long-term engagement and sustainable motivation.

8.3.2 Self-propelled engagement

In all the successful DMC cases, engagement was sustained mostly without the use of volitional control strategies and with little cognitive processing of forming intention.

Self-propelling automaticity was perhaps the function of two corresponding, yet complementary processes: behavioural routines and affective obsession. Most of the participants had developed study routines they engaged in on a daily basis: for example, studying for two hours before going to bed (e.g. Kawa) or watching a programme in the L2 at specific times every evening (e.g. Suzan). Despite their frequency, these routines did not seem to have become habits, defined as "actions that are frequently performed because they are initiated automatically" as a result of "environmental cues" (B. Gardner, 2012, p. 32). Since these DMC routines involved deliberate effortful commitment, they were consciously performed. In this research, the motivation for engagement in these routines came from both striving to make meaningful progress towards a valuable DMC goal, and also from the prospect of eudaimonia associated with productivity and self-actualisation (Waterman, 2008).

However, the participants also developed habits that were unconsciously and automatically performed in response to contextual cues. These DMC habits were automated behaviours such as searching in the L2 (versus in one's L1), watching TV and listening to radio programmes in the L2, and initiating a conversation in the L2 when encountering a foreigner. These habitual behaviours were reportedly executed by the participants in response to specific triggers—regardless of one's intentions. Once formed, they seemed to have been performed whenever they were triggered as a result of encountering a situation that the participants unconsciously perceived as an opportunity to improve their L2. This finding is consistent with a promising and recent line of research on habit formation (Lally, Van Jaarsveld, Potts, & Wardle, 2010; Lally, Wardle, & Gardner, 2011).

In their research on habit formation, Lally et al. (2010) found that automatic habits can be formed as a result of providing an individual with a salient cue. They

found that automaticity can be achieved after 66 days, with a range of 18-254 days. The finding of this research supports this timeframe as Sahar and her classmates, for example, seemed to have required around this period to reach automaticity. However, the results of this thesis might contribute additional insight into the issue of habit formation. In the majority of cases, the participants did not seem to go through an initial period required to form habits because they did not completely adopt new habits but modified their existing ones into DMC habits—such as changing their searching habits from doing it in the L1 to the L2. As such, initial self-control measures were not needed as theorised by Lally et al. (2010).

Moreover, in the DMC cases, both behavioural routines and habitual behaviours were supported by a predominant feeling of positive mood. This accelerated the process of habit formation and maximised the tendency to maintain daily study routines and respond to DMC-related cues. Therefore, despite the potential risk posed by breaks such as weekends and vacations in Lally et al.'s (2011) research, an occasional break—although caused by external factors such as exams in Suzan's case—did not lead to a change in DMC routines or habitual behaviour.

8.3.3 Effortless learning

The findings suggested that in all the cases, engagement in DMC activities featured both intensity and sustainability. Yet, engagement was not perceived as an effortful or tedious undertaking. Taken the results presented in Chapters 5 and 6 together, this perception of effort as being enjoyable was the function of deploying three processes: vision, routine development, and positive affect. Vision influenced the participants' perception of effort through two main ways. First, engagement—regardless of whether the task was intrinsically interesting—was considered as worthwhile because it led to

meaningful progress towards an imagined valuable end. Second, envisioning the momentum of goal attainment generated positive, short-lived emotions and increased motivational tendency.

The establishment and integration of behavioural learning routines helped the participants to see engagement as part of one's daily rituals, and not executing them was experienced as a deviation from one's norms and therefore odd. Some participants (e.g. Suzan) reported their continued engagement in their study routines despite being physically tired; yet, the inclination to engagement was not always due to a consciously-processed decision, but rather as a result of an established daily pattern performed without cognitive reasoning. This is consistent with research suggesting that once repeated frequently, behaviours can be performed independent from one's temporal intentions (Verplanken, Aarts, van Knippenberg, Moonen, 1998).

Positive affect seemed to be more influential than vision and routines in altering the perception of effort. This was probably due to the uniqueness of the positive affect experienced; in addition to feeling happy about goal-directed progress, the participants experienced positive emotionality in large part due to a perception of positive change, productivity, and learning. As such, what distinguishes DMCs from other types of engagement is that positive affect is experienced bilaterally: One feels happy as each step of a goal-governed contingent path (Raynor & Rubin, 1971) is completed, and also because one's skills, potential, and self are being developed at the present time (Deci & Ryan, 2008). In that sense, engagement in the DMC activities is rewarding regardless of whether it is perceived as intrinsically pleasurable or otherwise (Waterman, 2005), and it is seen as valuable without necessarily linking its outcome to a future goal or perceived as instrumental (Shell & Husman, 2001). Therefore, whereas the participants preferred studying to other forms of engagement because it meant goal-directed

progress, they also maintained subdued happiness and positive moods constantly in the background. Thus, both types of positive affect worked jointly to motivate the participants towards continued engagement and led them to perceive learning as the happiest, and most meaningful form of engagement—rather than effortful homework.

In addition to happiness, a DMC seemed to have brought meaning or even a reason to exist to the participants' lives. This was probably the function of the appraisal of engagement as leading to integrity, not merely efficacy. According to McGregor and Little (1998), efficacy "refers to how likely one's projects are to be successful" whereas integrity "refers to how consistent one's projects are with core aspects of the self" (p. 495). The results showed that the intensity of engagement of a DMC cannot be measured by how many hours one spends on learning, but by to what extent engagement is perceived meaningful and emotionally satisfying.

8.3.4 System predictability

DMCs are theorised to be periods of intense motivational engagement, clearly distinguishable from the normal motivational levels one experiences on a regular basis. In a DMC, one's motivation and effort are marked by being higher than the times before and after. In that period, however, motivational level is less liable to fluctuations or interruptions. This sustainability of motivation can be explained in light of complex dynamic systems theory, which assumes that although a system's outcome is hard, if not impossible, to predict, periods of stability, or attractor states, do occur (Larsen-Freeman & Cameron, 2008). From this perspective, a DMC is not only a stable motivational trajectory, but it also acts as a regulator of motivational and emotional fluctuations so the system outcome is almost always predictable (Dörnyei et al., 2015). Whereas the lack of predictability constitutes a major barrier to empirical research, this window of

predictability that DMCs provide can offer research a unique opportunity for systemic investigation (Dörnyei et al., 2015).

The DMCs studied for this thesis provide general support for this theoretical conceptualisation. Of the retrospective cases of periods of motivational surges, none of the respondents described a discontinued experience, and as such no cases of long-term motivational surges were rejected due to the lack of sustainability. On the other hand, of the six individuals I followed for a few months in search of potential DMCs, four of them seemed to have maintained their motivational surges consistently—although one student, Julia, did not turn out as a DMC case (see Chapter 4). Two participants however failed to keep up their initial surge in the long run despite experiencing similar circumstances of what describes a DMC launch. In that sense, this thesis has found that a successful DMC launch might not successfully predict a sustainable DMC. As such, system predictability in DMCs might not be taken for granted unless and before a functioning DMC structure has been established.

8.3.5 Optimal group performance

Of considerable importance, the findings reported on a number of group DMCs, and supported not only the occurrence of DMCs within groups of learners, but also that group DMCs can probably be superior to other forms of group performance. Whereas other forms of group performance such as cooperative learning (Brooks & Ammons, 2003; Johnson et al., 1998) are liable to the risk of motivational loss as a result of teacher control, competition, or social loafing (Hill, 1982; Karau & Williams, 2001; Kerr, 1983; Kerr & Bruun, 1983), the findings of this thesis suggest that in a group DMC, an optimal level of group performance can be achieved in part because of the immunity of DMCs from these challenges.

First, the danger of teacher control was eliminated completely in all the cases. Not only did autonomy emerge as a dominant theme and a major factor in fostering group performance, the teachers involved played an assistive role. The teachers acted as facilitators illustrating task expectations and encouraging progress. Second, rather than hindering motivation, competition urged the groups to invest more effort. As reported from the booster project cases (see Chapter 7), intergroup (versus intragroup) competition seemed to be a motivating force through provoking a sense of group identity and group pride. Third, the potential risk of social loafing was minimised through a number of mechanisms. All the DMC groups were capable of developing a unique group structure whose major initial task was to identify and distribute roles and responsibilities for each member and this helped individual members to gain confidence and the perception that their unique contribution mattered (although in the projects that included a final presentation, individual contribution was more identifiable). Secondly, through the utilisation of "one group, one destiny" spirit, the groups became functioning but also cohesive, and their members shared respect towards, and close friendships with one another. As the results showed, group cohesion was achieved mostly after all group members resolved their differences and disputes. Third, as all the groups benefited from a group leader, the leaders helped the groups to ensure that member contribution was recognised.

Although we may associate a group DMC with a well-designed-and-executed classroom project (Dörnyei et al., 2016; Henry et al., 2015), the findings imply that a DMC can deliver beyond what a project is capable of. As the participant teacher, (Sophie, see Quote 7.20) reflected, her students achieved beyond what one could expect from a project. Whereas the aim of a project is mainly its outcome, a group DMC is motivating its members because of being part of the process, and although a

project may utilise an effective structure, a group DMC benefits from an enjoyable, non-threatening atmosphere that generates a well-functioning, cohesive, and blissful group. Therefore, a typical, "fully-fledged" group DMC is probably the highest, most mature, and optimal form of group engagement, in the same vein as individual DMCs are the "optimal aggregate" of unique human motivational properties (Dörnyei et al., 2016, p. 80).

8.4 Practical implications: inciting performance turns through motivational momentums

The findings of this research supported the occurrence of group DMCs amongst various group levels, sizes, and for different timescales. In designing a DMC-generating activity, the parameters of efficacy reported in Chapter 7 can be of considerable value. Although more research is needed to expand our understanding of how to best engineer a group DMC, I discuss some of the main recommendations supported by the empirical findings.

8.4.1 Auxiliary motivational boost

In all the group DMC cases studied, substantial and mostly unprecedented amounts of collective effort were expended. This finding might suggest that a group DMC intervention can be best used as a temporary, on-and-off type of treatment to improve students in specific language areas and to bring back life to an unmoving classroom. Too frequent DMCs might lead to burnout (as explained in Chapter 7). Moreover, it seemed that a group DMC experience was perceived by the group members as unique as they performed beyond their expectations—as opposed to their individual or normal classroom motivational levels. Furthermore, in all the group DMC cases, a

clear transformation from demotivation into high motivation was identified as the groups entered their DMCs. Yet, since a group DMC was found to affect the participants' lives in many ways—such as extending group work to after class—an occasional DMC might boost a class's motivation without exposing the students to undesired consequences.

8.4.2 Enhancing classroom dynamics

Similar to an individual DMC, a group DMC was triggered by the perceived linguistic value of a project, but, in the process, motivation for engagement primarily came from the enjoyment of being part of a functioning and cohesive group. In turn, enjoyment enhanced a member's tendency for continued engagement. As noticed from their narrative accounts, the participants appraised their engagement in large part because of the quality of the experiences, as opposed to the actual learning outcomes—and when they mentioned the outcome, they judged the usefulness of a project in terms of winning a competition or how their collective effort yielded. This implication might suggest that L2 teachers ought to be cautious not to make the linguistic aspects of a project too prominent; rather, they should be skilfully incorporated in the project so that a DMC-generating activity does not resemble an L2 task assigned as any regular classroom group exercise.

As the findings suggested, in many cases a group DMC emerged from group members who did not previously have any close ties to one another. Yet, the sincere relationships they developed increased their cooperation and friendship. This new form of group dynamics led the groups to work cooperatively and autonomously on improving their own learning and develop a positive attitude towards their learning

environment and process. L2 teachers might benefit from this research in regard to assisting students to overcome disputes and reach group cohesion.

8.4.3 Designing a DMC-generating project

Although inducing group DMCs was not in the agenda of this thesis, a number of general recommendations can be inferred from the findings. Before listing these points, it is helpful to reiterate the fact that three group DMCs were experienced in the form of projects; therefore, a DMC intervention programme might benefit particularly from utilising projects because they have the potential to provide a structure to direct collective effort towards a shared goal (Dörnyei, 1997). The findings suggest that helping students to get into the DMC mode is the most crucial step in generating a successful DMC as the groups seem to manage to maintain motivational momentum in the subsequent stages without the need for much teacher support. Based on the findings and in assigning a group project, these recommendations can be taken into account:

- Rationalising the significance of the group project: not only do students have to see good reasons for engagement, but they also need to find a project goal authentic and relevant to their personal benefits. Therefore, teachers might need to associate a project with potential improvements in three main aspects: real-world skills, language skills, and content knowledge (Beckett & Slater, 2005).
- Providing clear criteria for assessment: many groups spent a relatively long time processing what they were exactly asked to produce, and it seemed that the lack of clear guidelines led to ambiguity in what was expected from the groups and that in turn thwarted them from moving to the next stages of group life.
- Helping groups to adopt a group structure: an initial step in this regard might be helping the groups with distributing roles and responsibilities among each other.

This process contributes to a sense of equality and helps to make individual effort identifiable which is key to reducing social loafing (Williams, Harkins, & Latané, 1981). Encouraging students to arrange meetings outside of class might also help groups to bond together and maintain commitment.

- Supporting groups to be cohesive: in consistence with previous research (e.g. see Clément, Dörnyei, & Noels, 1994; Dörnyei, 1997), group cohesion was identified as central to a DMC's generation and maintenance. Helping students to form their own group identity, in part through the use of inter-group competition between different groups (Dörnyei, 1997; Tauer & Harackiewicz, 2004) seems to be productive.
- Focusing on the final product: explaining what will be expected at the end of their projects had a great motivational influence on the groups to present their best. Among strategies teachers can use are asking groups to make a group presentation; requiring from groups to produce a poster; and informing students about the presence of a real audience (Cottrell, Wack, Sekerak, & Rittle, 1968) and final ceremonies such as group dinners and parties to celebrate success. The prospect of these final events might help groups to formulate a group vision (Dörnyei & Kubanyiova, 2014).

In general, teachers need to maintain a delicate balance between providing autonomy and too much intervention. In all the group DMCs studied, a sense of autonomy seemed to be positively contributing to the students' endorsement of the projects and their heightened motivation, a finding consistent with the role of autonomy in enhancing innovative group projects (Hafner & Miller, 2011; Hoegl & Parboteeah, 2006; Kessler & Bikowski, 2010; Scarbrough et al., 2004).

8.4.4 Teacher DMCs

As discussed in Chapter 7, the teachers whose students experienced a group DMC did not engage in traditional teaching roles as they did in the rest of their teaching experience. This was in great part because a DMC group functioned autonomously without disciplinary regulation from the teacher. The results suggested that this autonomy was a group choice more than being a teacher policy for a particular group activity. DMC groups are characterised by group cohesion and group pride which might eliminate the need for external support; relying on the teacher can probably decrease the positive feeling and the perception that the group is mature enough to own the process, and that achievement is solely the outcome of group effort. Some of the teachers interviewed discussed an altered role which focused on offering consultation and positive feedback, and sometimes helping group leaders with improving group dynamics.

This altered role of teacher has significant practical implications for L2 classroom. Despite adopting a student-centred approach to L2 teaching (Beckett & Slater, 2005) to help students become independent learners in the long run, this new teacher position can help teachers to focus on other areas in their teaching such as creativity and innovation. Furthermore, it will have a positive impact on teacher motivation. As reported in Chapter 7, as a result of experiencing group DMCs in their students, at least one teacher (i.e. Sophie) was made to perceive teaching differently; teaching was no longer seen as a form of employment, but also a source of enjoyment and personal fulfilment (Seligman, 2002). This altered teacher role can also be applied to other school actors such as principals and staff; for example, the data on a school DMC showed not only the occurrence of group DMCs in large educational settings, but

also that an entire school can thrive as a result of a DMC and its impact on students and teachers alike.

8.5 Limitations

This thesis has had several limitations. First, it did not focus on the frequency of DMCs among L2 learners or how widespread they are among groups of learners. Although measuring the occurrence of such experiences is a difficult task at the initial stages of studying a new motivational phenomenon about which little is empirically known, questionnaire methods might nonetheless be a useful tool for this purpose. Repeated studies perhaps strengthen the validity of such attempts.

As discussed earlier, the notion of DMCs is new in motivational psychology and L2 motivation with only a few conceptual and one empirical publications. As such, this and other pioneering works on DMCs face the challenge of proving how valid the concept is, both conceptually and phenomenally. Although this exploratory thesis identified experiences that resemble what we (i.e. Dörnyei et al., 2014) had conceptualised as DMCs, this thesis cannot make the ultimate claim about the validity of the construct as depicted in earlier conceptualisations; to do this, further and perhaps larger scale investigations might be required.

Since I have been involved in developing the very foundation of the DMC, the issue of biasedness is inevitable and that also represents a limitation of the current research. Although the choice of phenomenology as a method —in which the researcher commits to bracket his/her earlier presuppositions and remain true to the phenomenon in question—was in part made to tackle this issue, my unconscious inclinations might have an impact on leading me towards certain interpretations. This is especially true to

the areas of this research where I made use of pre-existing concepts such as the DMC launch and DMC structure.

Somewhat the same can be said in regard to the issue of social desirability from the part of the respondents. As mentioned earlier, most of the participants discussed their experiences with enthusiasm and eagerness. Although attempts were made so they were not led to report what the researcher might have liked to hear, through for example not sharing any conceptual elements of DMCs with them, it is not unlikely that some of the participants assumed what might have been interesting to the researcher.

In addition to the effect of the remembering self (Kahneman, 2011; see Chapter 6) and the issue of accurately recalling the experiences, some of the participants might have exaggerated in reporting certain areas of their experiences. This could have particularly been the case for those participants who reported considerable amounts of positive affect such as pride and enjoyment. In the majority of the cases, a DMC experience was linked to valuable personal goals; as such, the participants might have wished to portrait their stories to represent outstanding achievements.

Another limitation is related to the method used in this research. While a phenomenological approach provides unique possibilities to examine individuals' experiences of highly intense motivation, there are limitations in regard to what this method permits to report on. Whereas some of the participants discussed their experiences in relation to events and processes, this thesis was unable to include those areas in the findings. Additionally, although an interpretive element was added to the mainly descriptive phenomenology, this method did not allow for making claims about causality and inferring possible reasons for the participants' experiences. Future research can perhaps unveil those relationships through the use of other investigation methods.

As discussed in Chapter 4, part of the data were collected through written accounts and over-the-phone interviews. That and the researcher's attempt to avoid biasedness and social desirability by allowing the participants to mostly describe and narrate their experiences might have posed limitations to the selection process. As such, at times, enough data were not obtained on cases that might not have been fully-fledged DMCs, but nevertheless interesting cases to examine. Also, there have been limitations in regard to the extent of the data, the nature of the data sources, and the tricky task of gaining 'the right mix' of breadth and depth.

As with most of qualitative research, the nature of the data analysis is based in large part on the intuition and personal judgment of the researcher. Therefore, a different researcher might have reached different findings. In finalising the themes in Chapter 5, for example, additional themes could have been identified. Although attempts were made to finalise themes that could reflect the 'bulk' of the dataset, the task of finalising the themes might still have been guided in large part by the researcher's subjective evaluation of what represented 'significant' or 'interesting' in the data. To tackle this and enhance validity, more could have been achieved such as through peer debriefing and an audit trail (Sanders, 2003).

Despite studying a number of participants while they were experiencing a DMC, this research only included a number of postgraduate students, not L2 learners. Although the premise of the DMC is not restricted to L2 learning, future research projects might be needed to address this limitation and to discriminate potential differences between L2 and non-L2 contexts.

None of the participants were studied for multiple DMC cases, which would be necessary to broaden the scope of the DMC construct. Studying such cases is also important to make comparisons between different DMCs in relation to their context, intensity, longevity, and outcome. This will also help in understanding the dynamics of learner trajectories (Henry, 2015). Also, this thesis did not investigate any DMC cases in which learners aimed to integrate into a target culture in a bilingual setting.

8.6 Conclusion

The main premise of this thesis was that the conceptualisation of the directed motivational current, as a novel construct, is a significant contribution to the L2 motivation field. As a phenomenon, a DMC features both motivational intensity and sustainability in a unique amalgam of superlative motivational properties. Once in a DMC, individuals and groups can reach an unprecedented level of performance and achieve extraordinary outcomes. As a theory, the DMC exemplifies a concept which combines optimal performance, self-propelling continuity, renewable energy, and positive affect.

The empirical findings of the current pioneering research strengthen the belief that DMCs are valid motivational occurrences, experienced in different domains and across various learner populations. The results also reveal that in SLA, where learning is by definition characterised by a need for longevity, DMCs can be particularly useful in empowering learners and teachers to overcome inertia and restore motivation. Although investigating methods to induce DMCs was not in the scope of the current research, future attempts might benefit from this research by focusing on whether accommodating all the DMC circumstances, conditions, and hallmarks this research unveiled can generate a DMC as depicted, lived, and experienced by the participants.

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