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Factors that may contribute to overcome maturational constraints in late second language learning: a case study of a highly proficient adult learner in a corporate EFL setting.

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1. Introduction

In an English as a foreign language (EFL) setting, globalization has raised the need for many employees in multinational companies to communicate efficiently with the head office, clients, suppliers and peers in England or the United States and more recently, with company branches in India, Singapore, China and Brazil. This communication, undoubtedly, takes place in English, the language of globalization.

Twenty five years ago, when globalization acquired the form in which we know it today, many multinational companies in Argentina and other countries around the world invested heavily in English-language training programs. Recently, the situation has changed because of budget restrictions and the urgency to hire employees who can start using the language as soon as they join the company. Due to this, applicants with a high proficiency level of English have much higher chances of getting a job than those whose level of English is poor. As a result, once the successful applicant joins the company, given the fact they turn out to be efficient professionals, their level of English will determine their differentiating value. This, in turn, will probably lead to better opportunities for career advancement. Since globalization started, especially in the case of certain professions, it has been difficult for companies to find professionals, even young professionals, with the level of English necessary to immediately be able to convey the right message orally and in writing to be clearly understood by foreign counterparts. The few who could do that had started learning English in their childhood and had later continued their studies. In contrast, there were two other situations: first, the great majority who had studied a little English in their adolescence but did not remember much so they had to be trained; second, the situation of many others, the late learners, both young and older professionals who had never studied English before and realized then that the new world required new skills that they would have to acquire if they wanted to be part of it. The situation continues as such today.

This situation permits two basic yet important observations. First, the applicants to and employees in multinational companies usually display instrumental motivation, a type of extrinsic motivation; that is they are motivated by the anticipation of a reward from outside, rather than by feelings of internally rewarding consequences. Second, both will need to begin using English at a functional level, probably long before acquiring high proficiency in the language. This usually results in a functional "work English" which meets the everyday needs of the company environment without ever moving beyond the basics. Nevertheless, it is possible for learners to take a different path, to internalize extrinsic motivation by establishing a connection between inner desires and external demands. Ultimately sustaining that motivation until a high level of proficiency is achieved will lead them to become successful adult second language (L2) learners. Yet, it is a matter of further research what conditions and motivational influences may lead to this internalization and deep sustained motivation.

The fact that these learners are adults brings the factor of age in L2 acquisition into perspective. Many theorists have studied the age factor and the negative effects of maturation, and most of them have concluded that although age plays a detrimental role in the attainment of high proficiency, there is wide variability among adult L2 learners and some of them do seem to become exceptionally successful. Identifying which variables are key to this success has spurred various studies in the field. Today, the challenge is to explore how these variables interrelate to lead to successful acquisition in adulthood.

The context of acquisition is another factor to consider. In an English as a second language (ESL) setting, adults have access to the L2 in the world they are immersed daily; however, immersion does not necessarily solicit study and improvement. In fact, many adults in an ESL context may only utilize a bare minimum of language skills in order to function in society. Those adults who achieve near native like proficiency are exceptional cases. The same holds true for EFL late learners; although the context is different because input is limited to the classroom environment and individualized study. Despite the differences in context, successful adult L2 learners in both settings deviate from the level of proficiency achieved on average. Therefore, much more research is needed concerning the causes of this success and its underlying processes.

In this respect, the present study addresses the relationship between successful adult learners and the factors that may contribute to overcome maturational constraints in late L2 acquisition. The main factor to consider, as stated before, is motivation. In order to discuss motivation, it is important to take into account its influences and its interface with cognitive aspects of L2 learning, such as attentional effort, use of strategies, learning styles, memory processes and their neurobiological underpinnings. In addition, the case study developed in this research attempts to provide further information to the already known case history of successful adult learners. It specifically examines the success factors in an EFL setting, where further research is needed to avoid extrapolating the conclusions of ESL studies to this setting. In sum, there are two questions that will be addressed through the analysis of the case study:

1. Which were the main motivational influences underlying the subject's motivation in an EFL context?
2. How did motivation, cognitive aspects of L2 learning (attentional effort, use of strategies, learning style, memory processes) and L2 instruction interrelate in his process?

Prior to the discussion of these questions it is necessary to deal first with the topic of age in L2 by referring to theories concerning the critical period hypothesis and cases of successful adult learners. Second, I will describe the three phases of motivation depicted in Dörnyei and Otto's model, which will be the framework for the analysis of the case study. Third, I will examine questions of attention, memory, use of language learning and motivation maintenance strategies in relation to one's learning style and L2 instruction. Fourth, I will address the issue of the neurobiology of sustained motivation and attentional effort and its impact on memory processes. Finally, I will present the case study of a successful adult learner in a corporate setting through which I will attempt to answer the previously stated questions in the hope of contributing to future research on the topic.

2. Literature review

2.1. Age in second language acquisition

The connection between the age at which an individual receives first exposure to a language other than his or her L1 and the success of the learning experience has been one of the most frequently discussed questions in L2 acquisition. At present, most researchers accept the argument that learners receiving substantial exposure to the L2 at an early age generally reach higher levels of proficiency than learners whose exposure begins in late adolescence or adulthood. Nonetheless, the question that remains to be looked into is the great variability in the ultimate attainment of older learners, some of whom seem to achieve native-like proficiency in the L2.

According to Lenneberg (cited in Johnson and Newport 1989), for language to develop fully, acquisition must take place before the onset of puberty. However, Lenneberg´s hypothesis dealt only with first language acquisition, and the author was not conclusive about the possibility of applying the critical period hypothesis (CPH) to second language acquisition as well. Since no direct evidence was available for that hypothesis, he examined indirect evidence instead. Examples included the differing degrees in recovery from aphasia for children and adults, differing degrees in language acquisition in pre and post-pubescent learners, and language acquisition in the mentally retarded. Moreover, Lenneberg proposed an essentially neurological mechanism that might explain the change in learning abilities with maturation. His hypothesis was that the adult brain had lost its original plasticity and capacity for the reorganization necessary for language acquisition.

Some studies providing direct evidence have appeared since the publication of Lenneberg´s argument. One example, as depicted by Curtis (1977), is the well-known case of Genie, a girl deprived of language and social interaction until the age of thirteen. The author argues that after seven years of rehabilitation, Genie's lack of linguistic competence, especially as concerns syntax, supports Lenneberg´s critical period hypothesis. Nonetheless, in light of the nutritional, cognitive, and social deprivation in which Genie was reared, researchers have begun to question if her lack of competence resulted only from a lack of exposure during childhood.

More recent studies by Newport and Supalla (Newport, 1984; Newport and Supalla, 1987) have examined first language acquisition in the congenitally deaf, learners who may be exposed to a first language at varying ages, though they experience otherwise normal social and cognitive development. The first language for these individuals was American Sign Language (ASL). As age of exposure increased, a linear decline in performance occurred. The results demonstrated a scale of performance, with native learners scoring better than early learners, who in turn scored better than late learners in both language production and language comprehension.

As regards the CPH in L2, Patkowski (1980) and Johnson and Newport (1989) carried out several research studies which appear to prove its existence; however, those studies also show that there are exceptional cases of successful late learners. Patkowski (1980) studied 67 immigrants who had come to the United States and started learning English at various ages. They had lived in that country for various periods of time and were tested for syntactic correctness in writing in English. There were 33 subjects who had come to the United States before the age of 15 years (pre- puberty group) and 34 who had arrived after that age (post puberty group). All were highly educated and were either continuing their studies or employed in professional positions. The result was that 32 of 33 cases of the pre-puberty group scored at the 4+ or the 5 level (on a 1-5 scale, 1 being the lowest and 5 the highest). The mean in the post-puberty

group was at about the 3+ level. Nevertheless, the results show that in the post puberty group there was one person that scored 5 and four people who scored 4+. These results again highlight the question of individual differences and exceptional high proficiency in adult learners. Patkowski (ibid.) has not studied the reasons why some of the late learners attained high proficiency levels, but this is a matter to be investigated further.

Johnson and Newport (1989) set out to study the CPH in L2, in particular to determine if there was a linear decline or a sudden drop-off at puberty. In order to achieve their aim, they carried out a study of 46 native Chinese and Korean speakers that varied in age of arrival in the United States from ages 3 to 39. The results showed that those who had arrived at the age of 3 to 7 were native-like; those in the 8 to 10 group, showed a slight decline in performance compared with the native group. The group with age of arrival 11 to 15 showed an even sharper decline. After 16, there was no longer a relationship between age of arrival and level of attainment. The late arrival group (17 to 39) showed the lowest results on average but at the same time, they displayed significant differences in performance, a feature absent in the younger group. One individual in fact, aged 23, obtained 254 out of 276 answers right, which means that the number of mistakes was lower than some of the individuals who had arrived when they were 8 years old. "While the postpubescent learners did not reach as high a level of proficiency as the native or early learners, language had not become totally unlearnable for them" (Johnson and Newport 1989, p. 61). The authors also concluded that despite the deficiencies that may occur, many aspects of language can be learned at any age.

In fact, according to Marinova-Todd, Marshall and Snow (2000), most of the studies on the CPH in L2 have examined L2 learners' performance on average across age groups, instead of emphasizing the greater variation among the older learners' achievements in the L2. However, there seems to be an interesting array of research studies on successful late learners. To illustrate this, I have compiled an extensive list of such studies (see Appendix 1). To mention just a few, Ioup, Boustagui, Tigi and Moselle (1994) studied a subject who learned Arabic as an adult in an Arabic- speaking environment and attained levels of near native speaking performance. The subject was called Julie. Her level was assessed by means of a speech production task, a grammaticality judgement task, a translation task and some other tests.

Julie immigrated to Cairo from Britain at the age of 21 when she married an Egyptian. Nine days after her arrival, her husband was unexpectedly called to military service and she was left with non-English-speaking relatives. At the time of the study, she had lived in Egypt for 26 years and was working as an ESL teacher and trainer at university level. In terms of her process of acquisition, she mentioned the following points. Communication was her main goal; however, as she realized that grammatical correctness would facilitate the expression of meaning, she kept a copybook in which she wrote what she observed about the language, recording nouns, verbs and adjectives in separate pages. She asked for explicit feedback and made a mental and written note of the points of correction. She greatly appreciated being corrected. She was highly motivated to learn the language and used various types of strategies to achieve her aim. Bongaerts, Planken and Schils (1995) studied Dutch learners of English who began learning English in a formal instructional setting after age 12. The authors found that the learners were able to attain English pronunciation ratings within the same range as those attained by native-speakers controls. Bongaerts, *et al.* (ibid.) comments that the results he and his colleagues obtained may be partly explicable in terms of the very intensive training received by his subjects that focused their attention on subtle phonetic contrasts between the speech sounds of the target language and those of their L1. In addition, the most advanced learners had all received intensive training in the production of L2 speech sounds. Moyer (1999) investigated the phonetic/phonological attainment of 24 Anglophone graduates in German. One of the subjects was found to have a native speaker accent. The individual had begun studying German at age 22 and was largely self-taught. What distinguished him was the fact that he had a strong desire to sound German and he was deeply fascinated with the German language and the culture and therefore devoted many hours to his learning process. Birdsong (2003) investigated the L2 phonological attainment of 22 Anglophone learners of French. They were residents in France and their mean age of onset of acquisition was 24.5 years. Two of the subjects exhibited native levels of phonetic/phonological attainment. Both subjects had high levels of motivation with respect to learning French and both had been trained and corrected in respect to their French pronunciation.

As we have seen, it proves extremely difficult to disentangle the many factors that seem to contribute to determining ultimate attainment. The distinction is not consistently made between the neurobiological *potential* for acquisition and the *motivation to exploit* that potential. In all the examples mentioned above, we may assume that the adults who succeeded in achieving a high level of proficiency may have been talented. However, they also displayed high levels of motivation to achieve their aims that seems to have led to input enhancement (self-generated or by means of explicit instruction and conscious attention to form or sound).

Adults, in fact, seem to have many advantages over children in learning the L2. Ausubel stated that "older learners may be able to plot their new language on to concepts about the world which they already possess from their first language" (cited in Johnstone 2002, p.14). Johnstone (2002) also states that older learners may be more experienced in handling the discourse of conversations and in negotiating meaning. They are likely to have acquired a wide range of strategies for learning and, additionally, they may have a clearer sense than younger learners with respect to why they are learning an additional language. They may therefore be able to work with a clear purpose in mind towards the objectives they have set for themselves. This is what we have seen in the cases mentioned above.

Nevertheless, as with other cognitive skills (Bley-Vroman, 1988), not all adults exhibit these characteristics. Indeed, it is still a matter of research why some adults develop to their full potential in this field and others do not. Bley-Vroman (ibid.) points out the considerable amount of variation in the success of adult learners, even if other variables such as age, instruction, and exposure to the target language are kept constant.

We may conclude, then, that although there seems to be a CPH there are quite a few adults that are, in fact, able to overcome maturational constraints and acquire near native levels of proficiency and that this does not happen automatically but with effort. Motivation seems to be the key not only to initiate the process, but to sustain it until the aim is achieved.

2.2. Motivation

Motivation is not just the initial impulse to do something. Motivation research should address the basic question of why people choose to do something, how long they are willing to sustain the activity, and with what effort they are going to pursue it. Motivation psychology has expended a great deal of effort on explaining the range of possible motives as well as the potential influences on human behaviour. The various competing theories in motivational psychology are related to the selection of the principal factors on which to anchor the underlying theory.

As far as L2 acquisition is concerned, for many years, the discussion had been focused on whether learners were instrumentally or integratively motivated (Gardner and Lambert, 1972) and the authors concluded that integrativeness (i.e. the desire to become a member of the target community) generally accompanied higher scores on proficiency tests in a foreign language. In the cases that were cited in the previous section, we have seen clear cases of integrative motives. Other researchers, such as Lukmani (1972), demonstrated that learners who were instrumentally motivated scored higher in tests of English proficiency. However, this dichotomy does not seem to be such according to Brown (2007), who argues that instrumentality and integrativeness are not *types* of motivation but rather *orientations.* Therefore, within each orientation, the learner can have either *high or low motivational intensity*. As we are going to see later, it is precisely the degree of intensity within a certain context or orientation what seems to lead individuals to success. In an EFL environment, especially in the corporate world, successful learners seem to display a combination of both motivational and cognitive factors. Motivational factors are related to work needs as well as the need for achievement and power. Cognitive factors are related to the use of cognitive strategies such as rehearsal, elaboration, organization and metacognitive strategies, which involve planning, monitoring and self-regulation. Cognitive and metacognitive strategies seem to be put into practice to their fullest potential when learners are highly motivated.

As we have discussed thus far, when referring to high proficiency levels, motivation is such a central but so intangible a concept that it is necessary to understand its subcomponents in order to give a clear answer to the question of how one can create, foster and maintain motivation throughout the learning process. This is precisely what Dornyei and Otto have accomplished with their model of motivational influences in L2 learning. Taking into account the pre-existing theories, the authors re-formulated the previous motivational constructs in terms of process-oriented behaviour. Their analysis of motivation in stages and subcomponents, with its emphasis on the initiation, enacting and evaluation of motivated behaviour, has made motivation a tangible object of study.

2.2.1. Sustained motivation: Dörnyei and Otto's model

In Dörnyei (2001), Dörnyei and Otto have organised the motivational influences of L2 learning along a sequence of actional events within a chain of initiating and enacting motivated behaviour. Motivational influences are the factors that bear upon each of the actional events. The authors describe a process-oriented behaviour that initiates, directs, coordinates, amplifies, terminates and evaluates the learning process. During this process, initial wishes and desires are selected, prioritized, operationalized and successfully or unsuccessfully acted out. Motivational influences regulate the degree of accomplishment of the actional events.

The model deals with three phases of motivation: *choice motivation*, associated with a pre-actional phase, which precedes the launching of action; *executive motivation*, which corresponds to an actional phase that energises action while it is being carried out; and *critical introspection*, a post actional phase in which the learner evaluates the action that has been completed or terminated. Each phase has particular characteristics and motivational influences.

The pre-actional phase: choice motivation

The model assumes that every individual has a great number of wishes, hopes and desires but that not all of them are further pursued. This phase entails three subprocesses with their corresponding motivational influences (see Table 1).

Table 1 - The pre-actional phase

SUBPROCESSES	MOTIVATIONAL INFLUENCES
✓ Goal setting	✓ Language-related values ✓ Instrumental benefits / intrinsic motivation ✓ External environment

Table 1 – The pre-actional phase (Cont.)

SUBPROCESSES	MOTIVATIONAL INFLUENCES
✓ Intention formation	✓ Expectancy of success (self-efficacy) ✓ Perceived relevance of goal ✓ Need for achievement ✓ Degree of self-determination ✓ Goal properties ✓ Learner beliefs about L2 learning. ✓ Urgency
✓ The initiation of intention enactment (developing an action plan)	✓ Perceived behaviour control ✓ Competing action tendencies ✓ Perceived consequences for not acting.

When the goal-setting process reaches a concrete outcome (that is, an actual goal), the motivated behaviour process begins. However, the goal does not initiate action by itself; it needs an intention to do so. This intention is influenced, among other factors by the "self-efficacy" belief. There is one main motivational influence that pervades the three phases: self-efficacy. According to Bandura (1994), "Perceived self-efficacy is concerned with people's beliefs in their capabilities to exercise control over their own functioning and over events that affect their lives. Beliefs in personal efficacy affect life choices, level of motivation, quality of functioning, resilience to adversity and vulnerability to stress. Given life circumstances, people must have a robust sense of efficacy to sustain the perseverant effort needed to succeed" (p.13).

Moreover, the intention involves a commitment, which is a highly responsible personal decision, as it may involve putting other goals aside. Adding commitment to a goal is the necessary step before formulating a manageable action plan which contains the concrete guidelines such as subtasks to implement, and a number of relevant strategies to follow within a time frame. The right opportunity for starting the action may never materialise if the means and resources are not available, so these are necessary, together with the start condition, to issue the "action-launching impulse" (Heckhausen and Kuhl, cited in Dörnyei 2001, p.88). According to Bandura (1994), "Personal goal setting is influenced by self-appraisal of capabilities. The stronger the perceived self-efficacy, the higher the goal challenges people set for themselves and the firmer is their commitment to them" (p.3).

The motivational influences in this phase include the individual's values, cost-benefit calculations, which are related to the relevance of the goal with respect to their current life concerns, need for achievement, self-determination and the learner's beliefs about L2 learning. These values and norms interplay with the *intrinsic pleasure* one gains from learning foreign languages and the instrumental benefits (*extrinsic motivation*) that the L2 knowledge can bring about, such as a good job or increased travel opportunities. Intrinsic motivation produces a different and more effective kind of learning than extrinsic motivation.

Intrinsic motivation is brought about by feelings of internally rewarding consequences, whereas extrinsic motivation is fueled by the anticipation of a reward from outside. Ushioda (2008) states that according to cognitive theories, research on motivation in language learning has shown the vital importance of intense intrinsic motivation in the attainment of high proficiency. The theory attributes this difference to the rewards of learning inherent in the learning process itself: self-satisfaction and a greater sense of self-worth, which both result from and sustain engagement in the learning process.

According to Noels, Pelletier, Clément and Vallerand (2000), intrinsic motivation is related to the need for achievement and self-determination, the desire to be self-initiating and self-regulating throughout the learning process in order to attain a valued goal. The authors state that even when the reason for learning a language may come from an external source, the intrinsically motivated learner will internalize it into his self-concept and this will become a self-incorporated pressure to pursue the goal. In this regard, Noels *et al.* (2000) have found a positive correlation between instrinsic motivation and high proficiency in speaking and reading.

Intrinsic motivation also relates to the expectancy of achieving the goal. This determines its general *potency* since the individual visualises the possible consequences of his or her actions. The level of aspiration also plays a critical role here. Whereas some people only want to acquire a working knowledge of the language, others strive for near-native proficiency. If commitment does not occur, the individual may need a "final push," such as a powerful external demand or a unique opportunity. Finally, commitment is also conditioned by the individual's belief that he or she has sufficient control over the outcome to exert effort towards achieving it. As the individual succeeds, his or her confidence increases and the goal becomes focused on the future instead of on the present. This leads to the second phase, executive motivation.

The actional phase: executive motivation

Executive motivation is the force that energises action while it is being carried out. As in the previous phase, each subprocess has its motivational influences (see Table 2).

The characteristics of this phase are the implementation of the action plan with its subtasks or subgoals, the appraisal of the progress one has made towards the outcome and the knowledge of strategies and how to use them. A key concept in this phase is self-regulation, that is, the degree to which individuals are active participants in their own learning.

Table 2 - The actional phase

SUBPROCESSES	MOTIVATIONAL INFLUENCES
✓ Implementation of the action plan with subtasks or subgoals	✓ The cumulative force of the "action – launching" impulse of the pre-actional phase and the perceived quality of the language experience
✓ Ongoing appraisal process	✓ Perceived relationship between action and outcome
✓ Use of strategies (language learning and motivation maintenance strategies)	✓ Knowledge and skills in using strategies

According to Dörnyei (2001), the impulse of the pre-actional phase has to be nurtured and protected in this phase because there is a natural tendency in individuals to lose sight of the goal, to get tired or bored of the activity or to give way to attractive distractions or competing action tendencies. Therefore, learners should acquire self-regulatory strategies, that is, "self-management skills that help to overcome environmental distractions and competing/distracting emotional or physical needs or states" (Dörnyei and Skehan, 2003 p.621). The perceived quality of the learning experience in this phase will also keep learners on track. Quality refers, in this framework, to the five stimulus appraisal dimensions in Schumann's theory (1997): novelty, pleasantness, goal/need significance, coping potential, and self and social image. It also relates to the appraisal system proposed by Keller in Crookes and Schmidt (1991): interest, relevance, expectancy and satisfaction. If learners evaluate the learning situation as a positive one in the terms defined above, they will be willing to sustain motivation throughout this phase; otherwise, initial motivation

gradually disappears. Setting proximal subgoals can also help learners increase their self-efficacy, self-confidence and self-determination, encouraging learner autonomy and promoting self-motivating learner strategies. According to Bandura (1994) "it requires a strong sense of self-efficacy to remain task oriented in the face of pressing situational demands" (p.3).

With respect to the perceived relationship between action and outcome, Ushioda (2008) states that as proficiency increases, the demands upon the learner grow exponentially with respect to cognitive and linguistic complexity and the range of skills and activities. At the same time, the potential rewards connected to a greater command of the language become increasingly more difficult to perceive. Therefore, Ushioda (ibid.) argues that in order for learners to remain motivated throughout this process, they must develop self-regulation strategies such as positive self-talk, setting short-term goals, effective time management and self-motivation with incentives and rewards.

Besides the self-regulatory strategies already mentioned, a key issue of this phase is the use of language learning strategies. According to O'Malley and Chamot (1990): "Learning strategies are special ways of processing information that enhance comprehension, learning, or retention of the information" (p.1). In other words, learning strategies play a key role in the language acquisition process, and that is why it is important to know not only what they are but also how information about learning strategies is stored in memory, how strategies are learned and may become automatic, and why they influence learning in a positive manner. According to the authors, motivation plays a very important role in the receptiveness of the learners to learning strategy training and in their ability to acquire new learning strategies. However, not all learners choose to use the same strategies. The question of what types of strategies are more useful to one learner or another seems to be related to the learner's style.

The interplay between learning styles and learning strategies

According to Skehan (1989), most of the research carried out in second language acquisition in the past decades has had the purpose of establishing "how learners are *similar,* and what processes of learning are *universal* instead of studying the *differences* between learners" (p. 1). In Nel's (2008) view, some individual differences are closely related to learning styles. Nel (ibid.) states that language researchers still need to more accurately determine the role played by individual differences in language learning, and that the variation in information processing among learners is a key topic in research on learning styles. According to the author, learning styles are a combination of preferences: preferences in the environment and style of instruction, preferences in information processing, and preferences connected to individual personality. Styles then, are general characteristics that differentiate one individual from another and strategies are specific techniques that individuals may use to address the issues of processing, storing, retrieving and communicating messages.

According to Nel (ibid.), there is no one learning style in particular that would characterize good language learners, but rather a characteristic of successful language learners seems to be the capacity to adapt to the requirements of a particular learning task or situation. In the same vein, Reid (1998) has likewise identified four basic perceptual style preferences: visual learners (those who learn primarily with their eyes, through reading books and charts for instance), auditory (those who learn primarily with their ears, through lectures or tapes for instance) , kinaesthetic (those who prefer to learn by experience) and tactile (those who learn "by doing, for instance building models or doing laboratory experiments). The author (ibid.) later on added the individual vs. group preference (individual learners learn better when they are alone whereas group learners prefer to learn in groups). Moreover, Reid (ibid.) argues that learning styles are not biological traits but rather strong habits that can be acquired or modified. Research seems to show that greater classroom success in an L2 is closely related to one's ability to use multiple learning styles. In addition, the fact that teachers understand the learner's learning styles is crucial to planning classes according to the learner's style, and at the same time is a good opportunity to help learners become aware of their style and expand their map of resources.

Concerning the use of language learning strategies, Chamot (2008) clarifies that thirty years ago, "good" language learners were thought to use learning strategies, whereas "bad" learners were not. Studies comparing successful language learners with less successful learners revealed this to be a myth, finding that both groups made use of language learning strategies. Additional research focused on the quality of language learning strategies and identified key features of successful strategic learners: a solid understanding of what is expected of them, metacognitive awareness of their own thinking and learning styles, and an ability to employ the strategies that are most suited both to their own skills and to the task at hand. Along those lines, Leaver, Ehrman and Shekhtman (2005) agree with Nel (2008) that there is no one learning style that particularly characterizes successful learners. According to the authors, current research shows that there are multiple paths to high levels of proficiency and people from all walks of life

may reach near –native levels. Nevertheless, they also state there is a close relationship between styles and strategies, and that individuals with one set of styles will probably use very different strategies than those with another set of styles. This is where, from my point of view, the interface lies between learning styles and learning strategies. Successful learners are the ones who find the most suitable combination for them, take advantage of their strengths and find strategies to compensate for their weaknesses.

Another aspect to consider according to Leaver *et al.* (2005) is that no one can actually *see* a learning style; we can see behaviours and we can *infer* a style. That leads us to consider tools that can help learners reflect on their styles. Questionnaires are the most commonly used tool for pinpointing a learner's learning style. Although learners' inability to remember all the details may constitute a limitation, questionnaires nonetheless offer valuable insights into learning style that are impossible to observe directly.

As we have seen in this actional phase, the types of strategies that the learners use in relation to their learning style are of fundamental importance. However, as previously stated, the success of the actional phase also depends on the motivational influences of the pre-actional phase. These influences determine the intensity of the impulse to embark on a course of action. They include: the perceived quality of the learning experience and the perceived progress the learner has made towards the outcome. These influences lead the learner to the last phase of the cycle, the post-actional phase.

The post-actional phase: critical retrospection

The *post-actional phase* deals with the evaluation of the process the learner has undergone, its causes of success or failure and the future actional measures. This phase also entails subprocesses and motivational influences (see Table 3).

Table 3 - The post-actional phase

SUBPROCESSES	MOTIVATIONAL INFLUENCES
✓ Evaluation of accomplished action outcomes.	✓ Self-concept beliefs (self-confidence, self-efficacy, self-competence, self-worth).
✓ Formation of causal attributions and future action design.	✓ Teacher's feedback and learners' evaluation of the situation.

The first process during this phase entails evaluating the accomplished action outcomes. This process is influenced by one's self concept beliefs, one of which is self-efficacy, which, as stated earlier, is the belief in one's own capabilities to successfully perform an activity. According to Leaver, Ehrman and Shekhtman (2005), self-efficacy is closely related to motivation given the fact that if the learners have succeeded in one task, they will enter new projects confident that they will be able to be successful in those ones as well.

With respect to causal attributions, in Dörnyei 's (2001) view, during the post-actional phase, the learner assesses the extent of goal attainment by comparing initial plans and expectations to their actual implementation and results. With respect to causal attributions, learners with relatively high self-perceptions handle occasional failures much better than learners with low self-worth beliefs in that they tend to heighten and sustain effort in the face of failure, while mobilising new strategies to tackle the task. According to O'Malley and Chamot (1990), in this sense, motivation can be considered a component of metacognition because it plays a self-regulatory role in learning. Those learners who have experienced success in learning have developed confidence in their own ability to learn. According to Bandura (1994) self-efficacy beliefs influence causal attributions because people who regard themselves as highly efficacious attribute their failures to insufficient effort, whereas those who regard themselves as inefficacious attribute their failures to low ability. These self-beliefs will certainly influence future courses of action.

Dörnyei views the postactional phase as the final part of a cycle, in which the initial intention is replaced by new goals and desires, allowing the learner to move into a practical phase and begin the cycle once more if necessary.

Throughout the three motivational phases of the model we have seen what Brown (2007) calls "motivational intensity" and what Schumann (1997) calls "deep sustained learning", the interaction of cognition and emotion that modulates perception, attention and memory and that allows facts and skills to be encoded in the brain in such a way that it results in successful performance.

Self-efficacy, self determination and self-regulation have been central concepts in all three phases. As has been noted, learners possessing a high degree of self-efficacy set challenging goals for themselves and remain deeply committed to those goals. These learners respond to failure by increasing and sustaining their efforts, and they attribute failure to insufficient effort or to a lack of knowledge or acquirable skills. In contrast, learners with low self-efficacy, have low aspirations. They are not fully committed to their goals,

dwell on their personal shortcomings and are quick to give up when facing difficulties. Self-determination helps learners persevere and commit to their goals too and self regulation makes them become active participants in their learning process. In order to become successful adult learners, individuals must develop a very high sense of self-efficacy, self determination and self-regulation, factors which have various effects on cognitive and motivational processes.

2.2.2 The interface between motivation and cognition in an EFL setting
The concepts of motivation, attention and memory are closely related because they are part of a continuum in which motivation leads to attentional effort and benefits memory processes that may be aided by the use of learning strategies. If the process takes place successfully, information ends up being recorded in long term memory in such a way that the learner can recall it effectively every time they need it. As the recording and recalling processes get reinforced, the learner is more likely to achieve high proficiency.

The relationship between attention and L2 acquisition was hypothesized by Schmidt (1990) in his concept of "noticing". According to Schmidt "subliminal language learning is impossible and *noticing* is the necessary and sufficient condition for converting input into intake (…) Paying attention may be necessary if adult learners are to acquire redundant grammatical features" (p. 129). When Schmidt refers to "noticing", he means focal awareness.

Robinson (2003) describes the role of attention and memory in selection and maintenance of new information in memory. He also refers to sustained attention to the goals of action, an area where there has been less theoretical discussion. Robinson explains that sustained attention to an activity refers to the energetic state that is necessary to maintain performance on a task.

In Robinson´s view, Swain's notion of "pushed output" (i.e. output that is forced through tasks to comply with target language rules in a meaningful context), also promotes noticing. Swain (1985) also appears to implicate the sense of attention as effort, given the fact that pushed L2 production is more effortful than production aimed at skill development, i.e. at fluency. In fact, Swain states that "output promotes noticing, since learners may notice a gap between what they want to say and what they can say" (p125). Finally, she concludes that attention as effort is related to affective influences in L2 acquisition, such as motivation as we previously discussed in Dörnyei and Otto´s model (2001).

With respect to memory processes, Robinson (2003) states that it is possible for detected information to enter short-term memory and automatically access previously encoded information in long-term memory, without conscious awareness. The unconscious and automatic activation of representations in long-term memory is produced by "categorization mechanisms," whose role is to calculate the similarity between detected sensory inputs and previous inputs encoded in memory. Encoding of newly detected information in long-term memory can occur only once the information has entered focal attention and then short-term working memory, where it undergoes "rehearsal processes" before entering long-term memory.

O'Malley & Chamot (1990) had originally cited as important metalinguistic strategies both "directed attention" (deciding to attend to a learning task and to ignore distraction) and "selective attention" (deciding to attend to specific aspects of language input). They assumed that directed attention took place prior to the onset of a task. Later on, they concluded that many learners directed their attention to the task while it was ongoing, and so in that case directed attention could be considered a cognitive strategy as well. The same holds true for selective attention, which may be considered as an integral part of task performance.

In accord with Schmidt's (1990) view, both DeKeyser (2003) and Robinson (2003) support the fact that focus on form (explicit learning) is necessary to make learners consciously notice the abstract patterns that are not easily learned implicitly (only by attending to frequency cues), and this requires attentional effort. Moreover, Hyltenstam and Abrahamsson (2003) seem to be thinking along the same lines. By re-wording what Lenneberg had stated, they claim that: "Younger learners acquire second languages automatically from mere exposure, while older learners have to make conscious and laboured efforts" (p. 152). This leads us to the question of what type of instruction adult learners may benefit from the most.

 In Doughty's (2003) view, "the primary end of adult L2 instruction is to compensate for the developmental changes that put adults at a cognitive disadvantage" (p. 257). The theory claims that there are two lines of research concerning input processing by adults acquiring their second language: processing instruction studies and focus-on-form studies. Both deal with methods of efficiently directing L2 learners' attention to input cues which they would otherwise miss. Processing instruction studies, which focus on non-native input processing of utterances, have shown that adult L2 learners rely on L1 strategies for assigning grammatical roles when they attempt to process L2 utterances. Processing instruction seeks to eliminate this misapplication of L1 strategies to L2 input by familiarising learners with more reliable cues in the L2. According to Doughty (ibid.) "focus-on-form instruction is another approach to redirecting learner attention during input processing both within and across utterances" (p. 289). As the Noticing Hypothesis

suggests, pedagogical intervention is needed to alert learners of crucial features of the L2 input that they fail to notice on their own. According to Doughty (ibid.), this intervention or instruction may be effective if: 1) it relates to learners' needs, 2) it is psycholinguistically suitable, combining explicit analytical thinking with implicit learning during L2 input processing, and 3) specific progress in the L2 is assessed in relation to the target instruction. Likewise, Doughty, (ibid.) cites research indicating the importance of feedback on errors (negative feedback) in helping learners to continue their progress in the L2. According to Schmidt (2001, p.29), "Because goals and motivation are such important determinants of the focus on attention, paying deliberate attention to less salient or redundant aspects of L2 input may be a practical necessity (…) instructional practices that focus learner's attention on things that they are less likely to attend to or notice on their own also have a solid justification." Ellis (2001) argues that focus on form instruction, which is rich in communicative opportunities and which also makes salient the association between structures and functions, can facilitate and speed up learners' L2 acquisition.

As we have seen, learning styles, memory, attention, and the use of learning strategies are influenced by value mechanisms because adults have certain preferences they develop as they age, and based on these, they make decisions, set goals, pay attention and sustain motivation throughout the process. Furthermore, if the process combines focus on form instruction with communicative opportunities, adult learners' L2 acquisition is facilitated and accelerated. For this reason, Schumann (1997) concludes that cognition and emotions are highly interconnected and, more importantly, related to brain functions. In fact, techniques such as positron emission tomography (PET) and functional magnetic resonance imaging (fMRI), have provided evidence on some connections between motivation and mental/ emotional processing in general, which may be extended to L2 acquisition as well as.

2.3 The neurobiology of learning and motivation

According to Pulvermüller and Schumann (1994), in order to explain the variable success achieved in late language learners, it is necessary to understand the brain mechanisms that play a role in the language acquisition process. The authors explain the interaction between motivation and the acquisition process in the hope of "bridging the gap between linguistics and neurosciences" (p.682). In their view, the large variance in motivation among adults can account for the large variance in their language abilities.

According to Schumann, Crowell, Jones, Lee, Schuchert & Wood (2004), variable success achieved by late language learners is related to the degree of brain plasticity (the ability of neurons to connect with one another). Schumann *et al.* (ibid.) argue that some people are able to maintain their brain plasticity and capacity for storing new information for many post-critical period years, whereas some other people lose their brain plasticity with age.

Brain plasticity is related to myelination. Myelination is a process that involves the activity of brain cells: the neurons and the glial cells. The neurons are composed of a cell body, numerous fibers called dendrites and an axon, which has two essential functions: to conduct information in the form of electrical stimulation and to transport chemical substances. In the myelination process, the glial cells, which constitute the "white matter" of the brain, supply neurons with nutrition and wrap the axons of the neurons in myelin sheaths so that they can conduct electrical signals more rapidly. Myelination delineates learning pathways but at the same time, with maturation, it reduces flexibility.

Myelination happens gradually. The primary sensory and motor areas that are related to sound articulation myelinate early. This could be one of the reasons why many researchers hold the view that adult learners are not usually proficient in sound production. Higher-order association cortices (the prefrontal cortex involved in semantic processing) myelinate much later. Semantic knowledge is usually laid down through the emotive cortex, and it can be acquired through modification of connections. The gradual loss of plasticity of the primary areas, then, can explain grammatical deficits in late language learners.

However, as we will see later, positive emotional appraisal of language learning situations fosters the activity of neurotransmitters (chemical substances) which promote the formation of new assemblies. This is explained in one of the most important principles of neurosciences, a principle called "Hebb´s law" that underlies the functioning of various brain structures. According to this principle, nerve cells, neurons, become associated more strongly when they are frequently active at the same time. This applies to neurons connected to each other via synapses. Synapses get stronger when connected neurons fire either simultaneously or with a short delay. However, the strengthening of synaptic connections sometimes only takes place if an additional "trigger signal" is present. According to Pulvermüller and Schumann (1994), " the strengthening of connections between neurons possibly reports the neurobiological basis of learning" (p.691).

Pulvermüller and Schumann (1994) argue that the motivational factor is as important as the maturational factor. They state that dopamine, a neurotransmitter produced in several areas of the brain, plays

a decisive role in overcoming the limits imposed by maturation, and thus it may allow exceptional adult learners to reach native speaker abilities. Dopamine has many functions in the brain, including important roles in behaviour and cognition, motivation, reward, attention and learning.

Although dopaminergic neurons (those neurons whose primary neurotransmitter is dopamine) account for less than 1% of the total neuronal population of the brain, they have a profound effect on brain functions, as they modify the synaptic plasticity that constitutes the substrate of learning and memory. This is so because dopaminergic neurons are highly connected with parts of the limbic system where the amygdala (located in the temporal lobes) links cortical neurons to dopamine neurons in the midbrain. The amygdala is the part of the limbic brain that is related to preferences and aversions, and therefore it is involved in assessing value (Schumann, 1997). Once the situation is evaluated, a network gets activated. Dopaminergic neurons (see Figure 1) connect the amygdala with the frontal cortex where we find the perisylvian cortex, which is related to language functions. In effect, exceptionally strong dopaminergic input to this area of the brain may help late learners overcome the limits of maturation.

Figure 1 – Dopaminergic neurons
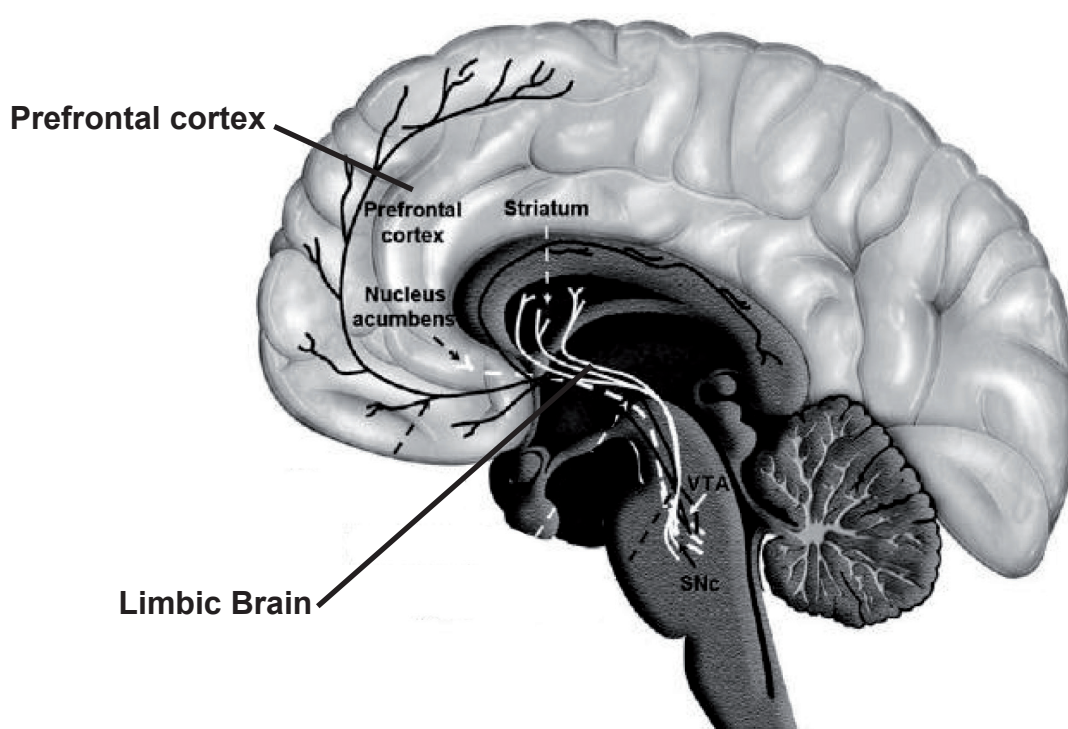
According to Arias-Carrión and Pöppel (2007), dopamine is also commonly associated with anticipatory desire and reward-seeking behaviours, providing feelings of enjoyment and reinforcement to motivate a person proactively to perform certain activities. Dopamine is released in anticipation of rewarding experiences, and thus it is related to goal-setting and resources assignment in order to obtain a certain reward.

Once the goal has been set, attentional effort is required to sustain it. According to Sarter, Gehring and Kozak (2006), increases in attentional effort are motivated by the expected performance outcome. In the absence of such motivation, attentional performance continues to decline or may cease altogether. In this sense, increases in attentional effort serve to optimize goal-directed behavioural and cognitive processes. A key aspect of the view of attentional effort as a cognitive incentive is the idea that motivation determines the degree of effort; thus, brain activity reflecting effortful cognitive control should be affected by incentive/motivational factors. We can conclude, therefore, that late learners can reach proficiency when they are highly motivated by a goal and are committed to sustaining effort throughout the process to attain it.

Memories are postulated to be represented by vastly interconnected networks of synapses in the brain. As we have seen, according to Hebbian theory, synaptic plasticity is the ability of the connection, or synapse, between two neurons to change in strength, and this is made possible through the work of neurotransmitters. Although maturation seems to make it difficult for neurotransmitters to be released and

therefore connect neurons, we have seen that motivation and attentional effort are crucial for the enhancing of synaptic plasticity. This process contributes to the creation of new neural networks to achieve long term memory, and therefore high levels of L2 performance in adult learners. We can assume, therefore, that synaptic plasticity is one of the important neurochemical foundations of learning and memory.

Acetylcholine, another neurotransmitter, is involved with synaptic plasticity. According to Birdsong (2004), the procedural memory system, which may be responsible for rule-based learning, is less susceptible to age effects than declarative memory, which provides for the learning and storage of facts, names, and arbitrary and irregular forms in young adults. The declarative memory system is located primarily in the hippocampus. The neurotransmitter acetylcholine plays a particularly important role in declarative memory and hippocampal function (both in the consolidation and retrieval of new memories). Birdsong (ibid.) points out that if we look at cognitive decline over the course of normal aging, neurofibriallary tangles and plaques that appear in the cells of the hippocampus and temporal association areas affect cortical pathways. They impair the work of neurotransmitters, particularly acetylcholine, which is crucial to encoding consolidation of memories. According to Ullman (2005), in the case of older adults both the procedural and the declarative aspects of L2 acquisition are affected, but as adult second language learners rely particularly heavily on declarative memory (both for storing semantic knowledge and memorizing complex forms and rules before they are abstracted in procedural memory). Ullman (ibid.) argues that intensive L2 exposure with attentional effort and practice are crucial to strengthen the connections for long-term hippocampal learning.

According to Gold (2003), a broad range of findings obtained during the past several decades supports the view that acetylcholine modulates several cognitive functions. These studies show that increasing acetylcholine functions enhances learning and memory because it modulates neural plasticity. In line with Birdsong (2004), Gold (2003) argues that acetylcholine enhances the hippocampal function which is related to memory and therefore, together with other neurotransmitters, may modulate learning and memory. Attentional effort seems to be related to acetylcholine efflux; in fact, performance in a sustained attention task was found to be associated with a significant increase in cortical acetylcholine efflux.We can assume then, from a neurobiological perspective, that motivation and attentional effort are crucial in the consolidation and retrieval of memories in late learners and are therefore closely related to exceptionally high performance in L2 acquisition.

3. Method

The research study is a case study which attempts to provide relevant evidence for the factors that may have contributed to the success in the attainment of a high level of proficiency of a late L2 learner in an EFL setting. These factors inlcude: deep sustained motivation, attentional effort, memory processes and their neurological underpinnings, learning style, use of language learning strategies and L2 instruction. This case hopes to add information to the already existing but meagre data on successful adults in an EFL setting who were able to somehow overcome maturational constraints, and it will hopefully contribute to further research on the topic.

I interviewed the subject of the study, a 33 year old executive, in 2007 while performing a language audit. His proficiency level at that time seemed to be very high (he had been tested with an international exam) and during the oral interview with me, the individual mentioned that he had started learning English as an adult, at the age of 25. He briefly explained what had motivated him to start learning at that age and how he had been able to sustain motivation to reach that level in spite of the pressures of corporate life. He was 31 at that time, and out of the hundreds of learners I have tested in my professional life, he really stood out. He falls into the category of the few exceptional L2 adult learners in the corporate world who have been able to attain a high level of proficiency, even though they started learning the language in adulthood. Some time later, I remembered his case and thought it would be worth investigating because it might shed light on the relationship between proficiency attainment and age, motivation, learning style use of strategies and L2 instruction. Therefore, the variables explored were the three motivational phases corresponding to Dörnyei and Otto's model, together with the accompanying theories of attentional effort and memory processes, intrinsic and extrinsic motivation as depicted in Noels *et al*.'s framework, the subject's proficiency level, his learning style, his use of language learning strategies and the type of L2 instruction he received.

3.1. Subject

LT holds a degree in Business Administration and several postgraduate courses in Argentina and abroad. At the time of the interview, he had been recently appointed Finance Manager of the oil company

he works for. L.T. has a history of high achievement, first at primary and high school, where he got top grades in academic subjects and also excelled in sports, and later at university and at work. He grew up in a monolingual middle class family and he attended a state school. His father died when he was a child and he had two uncles, one of whom, apparently, served as a father figure for him. Since childhood, L.T. had been brought up seeing that the men in his family were successful professionals (his father had been one, and his uncle was a very successful professional who worked for a multinational company, spoke English very well, travelled all over the world and excelled in his profession). In addition, his mother had always told him "you have come to this world to make the difference". He also has excellent interpersonal skills, as he had to move houses several times, which forced him to make new friends every time he arrived at a new place. This has had an impact on his personal and professional profile since he thinks of himself as a very good team player and deals with different cultures very well.

L. T. started learning English for the first time when he was 25 years old. He explained that up to that moment he knew that speaking English was important, but that he had had some other priorities, having especially focused on his university studies and his job. In January 2002, Argentina was going through a very difficult political and economic time, and he was working for an international bank where many people had been dismissed. He feared he might be dismissed as well. It was precisely at that moment when his uncle told him that at the end of that year, the company where he was working was going to recruit young professionals for a trainee program, but that in order to apply for the job he needed to have a very good command of English. He asked him if his level was good. It took L.T. less than a second to tell his uncle that he would apply for the position. It was a promise. That was the beginning of a learning process that entailed two phases. In the first one he went from level 0 to level 3 (Intermediate) in one year and in the second one, after having studied for several more years, and having lived in the USA for one year, he attained level 5 (Advanced).

From the very beginning, he made two important decisions and acted on them: to study as much as possible to be able to communicate well in English by the end of the year so as to apply for the job, and to keep the promise he had made to his uncle. He had been raised in a family environment in which living up to promises was highly valued. He said this several times during the interview. Furthermore, he became aware at that moment that his uncle was such a successful professional largely due to the fact that he spoke English so well. He had always admired him, but at that moment, when his uncle told him about the opportunity he could have, he felt a much greater sense of identification with him than he ever had before. In order to achieve his aim, he contacted a teacher immediately and together they designed a very intensive course that included many contact hours and many hours of self study too. He committed to the process entirely, and at the end of 2002, he applied for the job and got it.

From that moment on, he never stopped studying. Once he joined the company, he participated in the in-company English program, and when the company decided to stop those courses for a period of time, he continued paying for the courses himself and using his self-study method. Afterwards, he travelled to the United States and was working and using the language for a full year. He then went to England and, with great satisfaction, he studied the contents of an insurance course in English, feeling very proud of being able to study concepts "in the foreign language". However, he never stopped studying "the language," because when he joined the company where he is currently working, he negotiated having English classes as a part of his benefits package. He explains that he did all this because he has always been aware of the fact that he started learning English in adulthood, that he had made a considerable effort to attain a certain level of English and did not want to lose it. In fact, he realized that whenever he stopped practising for some time, for some specific reason he began to feel that his performance deteriorated, and this encouraged him even more to continue maintaining and improving the level he had acquired.

3.2. Data gathering instruments and procedure

Four instruments were used: an international level certification, an interview questionnaire, a learning styles survey and a learning strategies questionnaire.

3.2.1 An interview questionnaire

I conducted a semi-structured interview. The interviewee was asked to describe his second language learning experience, the age at which he started learning and the social and professional context in which he was involved. The questionnaire contained questions related to the theoretical concepts of motivation presented in Dörnyei (2001) such as pre-actional, actional and post-actional motivation across the self-determination continuum presented by Noels, Pelletier, Clement and Vallerand (2000). Various psychological aspects related to the different types of extrinsic and intrinsic motivation proposed by the Noels *et al.* model were explored.

Interview questionnaire

Question numbers	Purpose	Questions
Introduction1 to 6	To find out about the individual´s environment, nuclear family as well as larger social groups and age of onset in order to conform a profile.	1) Where were you born? 2) Where did you spend your childhood? 3) What languages were spoken in your home? 4) What's your educational background? 5) What's your current job? 6) How old were you when you started learning English?
Part 1: 7, 8 and sub items and 9 and sub items	To find out about age of onset, and to operationalize the concept of "choice motivation" in Dörnyei's framework and the concept of "extrinsic motivation" in Noels et.al's framework.	7) What motivated you initially to start learning English? 8) Once you had defined the goal, a- Did you have confidence you would achieve it? Why? What is your personal history of of achievement? b- What was the relevance of the goal for you? What were the cost-benefit calculations you made? (if you did) c- Did you set short-term goals? d- Was your initial intention to achieve near native proficiency? e- Did you have to choose among other priorities when you decided to focus on your goal? f- Did you achieve your initial aim? How long did it take you? 9) How do you feel about the Anglo-Saxon culture? Do you enjoy hearing foreign languages spoken? Do you enjoy speaking in a foreign language?

Interview questionnaire (Cont.)

Question numbers	Purpose	Questions
Part 2: 10 to 14	To operationalize the concept of "executive motivation" related to the actional phase of Dörnyei's framework, Schumann's concept of deep sustained learning, and Robinson´s concept of attentional effort and memory processes. The use of learning strategies will be touched upon here but further developed by means of Oxford's questionnaire.	10) How much time did you devote to language study to achieve your initial aim? (i.e. in terms of hours for week) 11) What form did the commitment take? (e.g. course attendance, self-study, other activities) 12) What language habits or study strategies did you find useful in learning English? 13) Once you had achieved your initial goal, were you interested in pushing your knowledge towards the target language even further? Why? What sustained your motivation? 14) Did you have a feeling of satisfaction when you accomplished difficult exercises in the target language? Did you experience pleasure when surpassing yourself in your foreign language studies?

Part 3: 15 and 16	To operationalize the concept of "critical retrospection" related to the post –actional motivational phase in Dörnyei's framework.	15) What do you attribute your success to? 16) Can you comment on the social consequences of achieving a high level of proficiency?

3.2.2 An international level certification

The chosen tool is called BULATS (Business Language Testing Service). It is a Cambridge University Test designed specifically to assess the English level of company employees and their proficiency in a business English context. Bulats is a diagnostic test, and it grades learners on a scale of 0 to 5. Bulats levels are in line with Alte levels and with the Common European Framework of Reference for languages (CEF). This framework provides a series of levels of language ability from Beginner (A1) to Upper Advanced (C2) and is the standard framework used in Europe for comparing candidates who have sat different tests in different languages (see Table 4).

Table 4 - BULATS scores and CEF Levels

Common European Framework (CEF) Levels	BULATS scores	ALTE Levels	Cambridge ESOL certificated examinations at these levels
C2	90-100	5	CPE
C1	75-89	4	CAE, BEC Higher
B2	60-74	3	FCE, BEC Vantage
B1	40-59	2	PET, BEC Preliminary
A2	20-39	1	KET
A1	0-19	0	-

The selected international level certification, BULATS, assesses at least three of the four measures of communicative competence proposed by Canale and Swain (1980) and Canale (1983): 1) *grammatical competence* (morphology, syntax, lexicon, phonology), 2) *sociolinguistic competence* (appropriate use of language), 3) *discourse competence* (cohesion and coherence). It also tests *illocutionary competence* in one of the listening comprehension tasks. As we know, this dimension of proficiency, which refers to a wide range of language functions, was presented by Bachman (1990) in his revised model of communicative ability in which he grouped under the category *pragmatic competence* both sociolinguistic ability and illocutionary competence. Given all these characteristics, by means of "Can-Do" statements related to the Common European Framework, BULATS provides a comprehensive view of a learner's proficiency.

3.2.3 SILL (Strategy inventory for language learning)

The subject was asked to complete the 50-item version of the Strategy Inventory for Language Learning (SILL) (Oxford 1990) designed for speakers of other languages learning English, in order to provide additional information to what he had already mentioned in the interview with respect to use of learning strategies. The SILL contains the direct and indirect strategies presented by Oxford (1990). Direct strategies are divided into memory, cognitive and compensation strategies. Indirect Strategies are divided into metacognitive, affective and social strategies. The questionnaire is divided into six parts indicated as A, B, C, D, E and F, each of which represents a group of learning strategies: A: memory strategies, B: cognitive strategies, C: compensatory strategies, D: metacognitive strategies, E: affective strategies and F: social strategies. The learner has to rate the statements for each part on a scale from 1 to 5 indicating how true of them each statement is (1 being *never or almost never true of me* and 5 being *always or almost always true of me*). The average for each part of the SILL shows which group of strategies the learner uses the most for learning English.

3.2.4 Perceptual learning style preference survey

The subject was asked to complete a 30-item survey designed by Joy Reid (1984). It provides information on whether learners are mainly visual, auditory, kinaesthetic or tactile, individual or group learners. The learner states whether he or she strongly agrees (SA), agrees (A), is undecided (U), disagrees (D) or strongly disagrees (SD) with each of the statements. Numbers 5 to 1 correspond to each of the categories mentioned above. Each group of scores are added and multiplied by two. The final result renders their major learning style preference (38-50), minor learning style preference (25-37) or negligible (0-24), which indicates that the learner has difficulty learning in that way. An explanation of each learning style preference is provided.

4. Results and discussion

4.1 Level of Proficiency attained

L.T. scored at an advanced level of proficiency (5 in BULATS [on a scale from 0 to 5]). This corresponds to a C2 in the CEF levels (see Table 5).

Table 5 - Overall result obtained

Common European Framework (CEF) Levels	BULATS scores	ALTE Levels	Cambridge ESOL certificated examinations at these levels
C2	90-100	5	CPE
C1	75-89	4	CAE, BEC Higher
B2	60-74	3	FCE, BEC Vantage
B1	40-59	2	PET, BEC Preliminary
A2	20-39	1	KET
A1	0-19	0	-

The areas tested were: listening comprehension, reading and language knowledge, speaking and writing (see Tables 6, 7 and 8). This comprehensive assessment shows L.T.'s very high level of grammatical, pragmatic and socio-linguistic competence in the terms defined by Canale and Swain (1980). L.T. especially stood out in oral interactive communication and discourse management both in his oral and written performance. These were probably the two aspects that he was able to improve the most during his stay in the United States, since before going there he was at approximately level 4 (upper intermediate).

Table 6 - Standard Test

Candidate	Listening	Reading and Language Knowledge	Global	CEF Level
L.T.	93	97	95	5

Table 7 - Speaking

Candidate	Range	Accuracy	Discourse Management	Pronunciation	Interactive Comm.	Global
L.T.	5	4	5	5-	5	5-
Comments	Range is appropriate to the task. Occasional inaccuracies in complex language. Oral discourse is coherent and cohesive, in fact he used fillers and hesitation devices to make up for scarce communication breakdowns. Pronunciation is easily understood/ does not need support from interlocutor. He is able to initiate dialogue and develop interaction effectively.					

Table 8 - Writing

Candidate	Range	Accuracy	Discourse Management	Appropriacy	Organisation (incl. format)	Global
L.T.	5	4+	5	5	5	5
Comments	It displays a wide range of language appropriately and accurately used. The text is effectively organised and cohesive. All key points in rubric have been developed. It shows a fully operational command of the written language.					

The following "Can-Do Statements" correspond to a BULATS level 5, the overall score L.T. obtained (see Table 9). For a complete description of the can-do statements per level see Appendix 2.

Table 9 - BULATS Can do Statements-Level 5

C2	5-Very Advanced	Research has shown that typical candidates at this level can: ✓ Use the telephone persuasively and effectively ✓ Understand all but the most specialised letters and documents ✓ Put points persuasively when dealing with clients, and speak effectively and at length in meetings ✓ Write most kinds of letters and reports and take dictation on non-routine matters

As we will see later, his first aim was to go from level 0 to level 3, because that was the level he needed in order to join the new company, and he achieved level 3 in one year. After that, he decided to continue studying. He is at presently at level 5. His initial achievement already showed his high motivational level. Moreover, the fact that he was able to sustain motivation until he achieved level 5 is worth further examination because this is precisely what has made him a successful adult learner.

4.2 Key cognitive and motivational factors in successful late L2 acquisition

The interview attempted to apply Dörnyei's (2001) framework to L.T's process. By means of the interview, I tried to assess the motivational effort that initiated and sustained L.T.'s learning process, combined with the results he obtained. It was divided into three parts corresponding to the three phases of the framework (choice motivation, the pre-actional phase; executive motivation, the actional phase; and critical retrospection, the post-actional phase). I have related the concepts of attention, memory processes and use of learning strategies and styles to the motivational phases in the framework as well.

Part 1: Choice motivation: the pre-actional phase

When L.T. was 25 years old, he had known for many years that learning English was important for everybody, but he had always had some other priorities. Argentina's socio-economic situation in 2002 combined with the fear of losing his job contrasted with the opportunity of starting a professional career in the multinational company his uncle was working for. All this became the "action launching impulse" Dörnyei (2001) refers to. The first subprocess of the pre-actional phase is goal setting. Table 10 shows the data on the positive motivational influences that L.T. displayed during this subprocess. As we can see, L.T. positively accomplished the influences proposed in the framework.

MOTIVATIONAL INFLUENCES	DATA
- Instrumental Benefits/ Intrinsic Motivation	He had the opportunity of starting a professional career in a multinational company: "I have an uncle who works for an international company and he offered me a job but that job required that I should have a command of the English language". He also wanted to fulfil the promise he had made to his uncle to take the English test at the end of that year: "I self-generated the commitment to acquire the language so as to get the job as well as to accomplish my promise to my uncle"
- Language- related values (Integrativeness)	He identifies with certain aspects of the Anglo-Saxon culture. He admires British culture and history and respects the fact that American people do a lot of planning and keep their promises: "I admire their cultures, what they do, and we can see results by having a look at their countries and the language is related to that".
- External environment (expectation of family/ working environment)	His mother had always told him that he would be able to overcome any difficulty in life: "My mother always told me "you came to this world to make the difference". Whenever I have a challenge in front of me, I remember that phrase "you are different, you can, you'll be able to overcome that obstacle" and it helps"

Table 10 – The pre-actional phase – Goal setting

MOTIVATIONAL INFLUENCES	DATA
- Instrumental Benefits/ Intrinsic Motivation	He had the opportunity of starting a professional career in a multinational company: "I have an uncle who works for an international company and he offered me a job but that job required that I should have a command of the English language". He also wanted to fulfil the promise he had made to his uncle to take the English test at the end of that year: "I self-generated the commitment to acquire the language so as to get the job as well as to accomplish my promise to my uncle"
- Language- related values (Integrativeness)	He identifies with certain aspects of the Anglo-Saxon culture. He admires British culture and history and respects the fact that American people do a lot of planning and keep their promises: "I admire their cultures, what they do, and we can see results by having a look at their countries and the language is related to that".
- External environment (expectation of family/ working environment)	His mother had always told him that he would be able to overcome any difficulty in life: "My mother always told me "you came to this world to make the difference". Whenever I have a challenge in front of me, I remember that phrase "you are different, you can, you'll be able to overcome that obstacle" and it helps"

It is interesting to analyse that although the initial reason for learning had come from a source external to him, he internalized it into his self concept, and therefore his instrumental goal interplayed with his intrinsic motivation in the self-determination continuum mentioned by Noels *et al*. (2000), ultimately contributing to sustained motivation.

With respect to language-related values, L.T. identifies with certain aspects of the Anglo-Saxon culture and draws a distinction between his feelings for the British and the American culture. He felt more at ease with the British, because he regards them as more sociable than the American people he had been in contact with and human contact is something that he values highly. He later on said that he enjoys sharing time with his wife and friends. In addition, in the case of the British culture, he loves their history, their creativity (he says they invented many things) and their sounds (he says he likes their music and pronunciation). In the case of the American culture, he values the practical aspects (the fact that their country yields good results, they are very clean, they do a lot of planning and they keep their promises). The interplay of values and intrinsic pleasure from being in contact with the foreign culture mentioned in Dörnyei (2001) is clearly seen here. Moreover, he clearly expressed in the interview that, in his view, it would be very difficult to learn a language if one does not feed some kind of affinity for the culture.

Finally, the external environment played a very important role: joining the international company was as a whole related to some of his life concerns: to become a successful professional and to live up to his mother's expectations. In order to do that, he needed to have a good command of English. In my view, L. T.'s mother was, in Bandura's (1994) words, a "self-efficacy builder" (p.3).

The second subprocess of the pre-actional phase is intention formation. L.T. enriched his learning process by positively accomplishing the motivational influences of this phase of the framework (see Table 11).

Table 11 – The pre-actional phase – Intention formation

MOTIVATIONAL INFLUENCES	DATA
- Expectancy of success (self-efficacy)	He was convinced that with effort, he was going to attain his aim, as he had done with all other challenges in his life.
- Perceived relevance of goal	He was about to lose his job in a bank in 2002, so getting this new job in a multinational company was highly relevant for him.
- Need for achievement	If he attained the goal, he would be following in his relatives' footsteps. The men in his family had always been successful professionals. "In my family, it's very traditional, that the men in the family are successful. My two uncles, my father".
- Degree of self- determination	He said he had a mentality focused on winning. He had been an excellent learner at school and university, he had done a post-graduate course. From the scratch I was boosted by my mother to study at university, to do a post-graduate course, to obtain high qualifications at the high school. Even in sports, I had a focused mentality on winning. I have very low tolerance to failure.
- Goal properties	The initial aim was very specific and had a very clear time-frame; he needed to be able to communicate effectively in English in one year's time.
- Learner beliefs about L2 learning	He was well aware that learning as an adult entailed making a conscious effort.
- Urgency	He only had one year to get from zero beginner to the end of the Intermediate Level.

In order to achieve the goal he had in mind, L.T. counted on the expectancy related to the high probability of being successful. This in turn determined the *potency* of the goal, since he visualised from the beginning that he was going to overcome the difficulty. This potency was enhanced by the relevance of the goal. Having the possibility of getting a promising job when the country was going through a very difficult time, was, in a way, a privilege.

With respect to the need for achievement and degree of self-determination, according to Knowles, Holton & Swanson (2005), adults have the potential to become self-directed beings, people who have arrived at a self concept of being responsible for their own lives and decisions. Therefore, many adults come to an educational activity with a great volume of experience and a clear idea of what they need to know, but not all of them transform the initial desire into a firm intention as L.T. did. L.T. was willing to invest considerable energy in a training process. What we see in the individuals that succeed such as L.T. is a very high degree of competence and self-determination that has its grounds in the sense of self-efficacy mentioned previously. L.T.'s self-appraisal of his capabilities bore upon his personal goal setting, and as he was able to perceive his self-efficacy, he set a challenging goal and was firmly committed to reaching it.

According to Deci and Ryan (as cited in Noels *et al*. 2000), an inborn need for competence and self determination is closely related to intrinsic motivation. Therefore, the authors contend that intrinsically motivated individuals seek challenging activities, which if completed, will provide a feeling of competence. L.T. was always looking for challenging activities in his life and hence was convinced he could live up to any circumstances he encountered. According to Deci (1980), the desire to be self-initiating and self-regulating is a prerequisite for any human behaviour to be intrinsically rewarding. Therefore, the essence of motivated action is a sense of autonomy. Deci (ibid.) explains that self-determination is founded on individual will, the capacity of inner desires and perceptions to select behaviours. In L.T.'s case, the need for achievement seemed to have been a deeply rooted characteristic of the male members of his family who seemed to have displayed the will to achieve their professional desires as he did.

In regards to goal properties, the fact that the goal was specific and had a clear time-frame also gave him a sense of achievement, as he could visualise the rewarding result. Moreover, he was aware of its urgency: he only had one year to achieve his initial goal. He was also very well aware of the fact that, as an adult, he would have to strive to acquire a foreign language.

The third subprocess of the pre-actional phase is the initiation of intention enactment. It was necessary for L.T. to transform his intention into a real commitment so as to advance towards his final aim. He was able to do so by accomplishing the motivational influences proposed in this section of the framework (see Table 12).

Table 12 – The pre-actional phase – The initiation of intention enactment

MOTIVATIONAL INFLUENCES	DATA
-Decision to design an action plan	He immediately contacted a teacher and de-cided to study several hours a week.
-Perceived behavior control	He was convinced that if he exerted effort, he was going to achieve the goal.
-Regulation of competing action tendencies	"I remember that in a way I had to put aside some personal things, for example reduce the time to share with my girl-friend or to be with my friends but I tried to put all my efforts both in the work as well as my language studies".
-Perceived consequences for not acting	He was aware of the fact that if he couldn't participate in the program that year, it would be very difficult for him to get another opportunity.

With respect to intention enactment, Dörnyei (2001) also mentions that adding commitment to a goal is the necessary step before formulating a manageable action plan. L.T. added commitment to his initial intention and transformed the enormous pressure he felt into action by looking for a teacher to guide him in the process: he did not speak a word in English at that time.

Planning is something that L.T. admires in the Anglo-Saxon culture and it is what he puts into practice in his own process. He had a clear goal, a firm intention, and was highly committed. He therefore defined a clear plan to follow, and looked for the resources and strategies he needed to attain his aim.

We may conclude then, that the pre-actional phase has been fundamental in L.T.'s process. In this phase, he set the goals to achieve his aim and enacted his intention by designing the action plan that he would implement in the next phase. As we previously mentioned, the sense of self-efficacy, self-determination and need for achievement were the key motivational forces that gave L.T. the perceived sense of control over the situation. They even allowed him to set competing tendencies aside while encouraging him to face up to the next phase.

Part 2: Executive motivation: the actional phase: attentional effort, memory processes, L2 instruction, learning style and the use of learning strategies

I have subdivided the actional phase into three parts so as to discuss each part in detail. In the first part of the actional phase, L.T. implemented his action plan, generated sub-tasks and monitored his learning process (see Table 13). In this part of the phase, I will also refer to the type of L2 instruction that L.T. received and his self-study method.

Table 13 - Actional phase – (Part A)

MOTIVATIONAL INFLUENCES	DATA
- Action plan implementation	He established a clear plan for one year: 12 hours a week (6 hours of classes and 6 hours of self-study). A total of 600hs in one year. His aim was to reach Alte level 3 in one year. He started from level 0 and he achieved his aim by the end of the year.
- Subtask generation and implementation	He had a pending test at university and he set out to take it as an objective for the first 6 months. He took it and passed.
- On-going appraisal process (of the learning experience and of one's own progress)	He monitored his performance closely by recording himself, checking with answer keys and getting teacher's feedback. I had a strong feeling of satisfaction when I went to the answer key and I realized I had got everything right. It was tough for me when I found that I hade made a mistake but that at the same time motivated me ever further to continue working on it or I made a note and went to my teacher and said I have a problem with this.

The intensity of the impulse to embark on his learning process and the belief that he had sufficient control over the outcome to exert effort towards achieving it led him to implement a one-year plan and subgoals. The notion of passing the university test that he had postponed for so many years also encouraged him to continue studying hard to achieve his final aim. According to Dörnyei, perceiving the progress or success in the learning experience helps the learner to increase his/her self-confidence and self-determination as well as encouraging learner autonomy.

Another characteristic of his process was the fact that he sustained his attention throughout the process. With respect to the attentional focus, according to Schmidt (1990), "noticing" or focal awareness is important in order to transform input into intake, while Robinson (2003) relates attention to motivation, stating that attention is mediated by affective variables such as motivation. The fact that L.T. stated a clear goal and focused his attention towards achieving it clearly contributed to his excellent results.

We can also infer that he was able to record an important amount of information in long-term memory quite rapidly in order to be able to advance so much in such a short time. With respect to memory processes, Robinson (2003) holds the view that encoding of newly detected information in long-term memory can only occur once the information has entered focal attention and has undergone the "rehearsal processes". Such processes are carried out by means of the use of learning strategies as we will see later. L.T. invested much more attentional effort than the average level of self- monitoring of production when he tried to correct his pronunciation and record new lexical items. This seems to reflect the process mentioned by Stevick (1996) in which information passes through the senses to short-term memory, then goes from short-term to long-term memory and finally from long-term memory to output. This entire process is mediated by attention and neurotransmitters such as dopamine and acetylcholine (Ullman 2005 and Birdsong 2008). By sustaining attention throughout the process, L.T. seems to have been able to create new neural networks concerning sounds and lexical items, to record information in long-term memory and to transform it into richer output, an instructional process that took him from level 0 to level 3 in one year.

With respect to the type of instructional process L.T. underwent, we previously mentioned Doughty's (2003) definition of focus-on-form instruction, in which learner attention is redirected during input processing

to more reliable cues in the L2. Negative feedback was a technique that L.T.'s teacher used all the time, which he found very useful and even stimulating to work even harder. L. T.'s appreciation of the negative feedback technique has a lot to do with his personality, because some other learners may find constant negative feedback inhibiting. In the type of instruction he received, we can also see the application of the notion of the Noticing Hypothesis that suggests that pedagogical intervention is necessary to alert learners of crucial features in the input that may otherwise go unnoticed. Moreover, the type of L2 instruction he received also fulfilled the requirements of what Doughty (ibid.) calls effective L2 instruction: it met his needs, it was psycholinguistically appropriate (there was both explicit and implicit learning during the process) and progress with respect to his target goals was assessed. L.T. also worked very hard on his own, doing exercises that forced him to put theory into practice. He did the exercises and then checked the key and corrected himself

    In the second part of the actional phase we can see that L.T. used several other learning and motivational maintenance strategies that contributed significantly to his learning process (see Table 14).

Table 14 - Actional phase – (Part B)

MOTIVATIONAL INFLUENCES	DATA
- Use of Language learning strategies	Language learning strategies: He used several strategies. In fact, he had his own self-study method.
- Motivational maintenance strategies	A very good training for me was to watch the movies. At that time, we didn't have DVD. I tried to rent a movie and I watched it with the captions but for one or two minutes I tried to capture the plot without reading the captions and it was very very useful for me and also I copied the pronunciation, I tried to imitate their pronunciation. Imitation is a key for me. I played the movie once and again. There are words I love. When I like a word I try to pronounce it a lot of times till I get it. I also made notes of the words and the meaning and examples… I listened to songs and I tried to pay attention to the lyrics and when I couldn't understand I went to the scripts. Motivational maintenance strategies: His primary affective strategy was positive self – talk. He reminded himself at all times that he would be able to achieve whatever he committed himself to.

    According to Dörnyei (2001), one of the main characteristics of this phase is the use of strategies. In O'Malley and Chamot's (1990) view, the use of learning strategies plays a key role in the language acquisition process, and motivation is an essential aspect in the receptiveness of the learners to the acquisition of those strategies. L.T. devoted several hours a week to attending classes and to his self –study, for which he had created his own study method. That method was mainly based on his auditory ability and his linguistic verbal intelligence, which led him to create relations between words and sounds. He also made semantic associations by means of categorising words and providing definitions and examples. As we can see, apart from using several metacognitive strategies to plan and monitor his own process, L.T. also used several cognitive strategies.
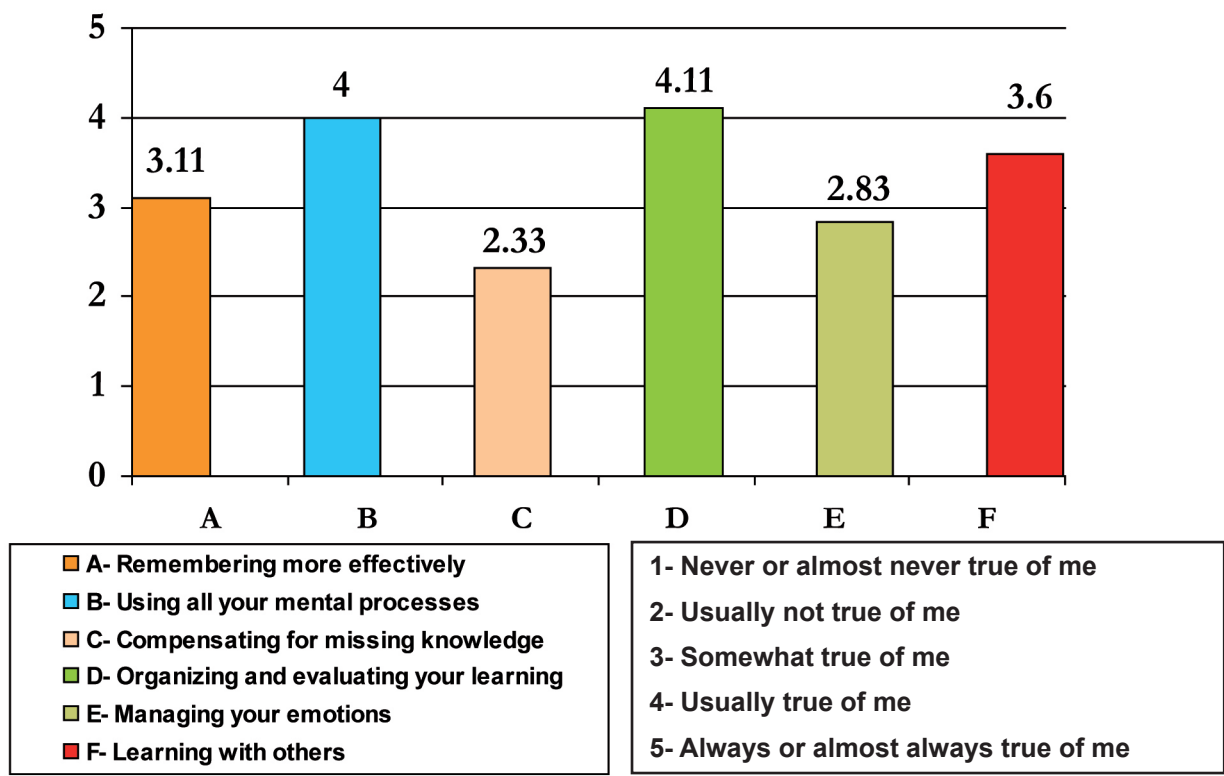
    With respect to motivation maintenance strategies, as Dörnyei (2001) had pointed out, unless motivation is actively nurtured and protected during the actional phase, the natural tendency is to get tired or bored of the activity and to give way to competing action tendencies that will result in motivation gradually

disappearing. L.T. nurtured and protected his motivation throughout the process by reminding himself of the final achievement he had in mind. He even prioritised his learning of the language over other personal matters. As we said before, language proficiency is a difficult and challenging goal. Ushioda (2008) states that as proficiency increases, the demands upon the learner grow exponentially with respect to cognitive and linguistic complexity and the range of skills and activities. Therefore, to sustain motivation throughout the process, the author argues that learners must develop self-regulation strategies such as positive self-talk and self-motivation. L.T.'s source of motivation in this stage was the actual challenge itself. He wanted to feel that he was given something very difficult to solve and that he was able to accomplish it. This encouraged him to work even harder and finally achieve a level 3 status by the end of the year.

Returning to the topic of what makes a good language learner *good,* Oxford and Lee (2008) conclude that strategy awareness and use lie at the core of it. According to the authors (ibid.) even a difficulty so stable as age constraints can be overcome by motivation in the use of metacognition and the rest of the strategies. In fact, strategy use was a characteristic of L.T.'s process.

L.T.'s strategy use

Chart 1 shows L.T.'s frequency of use of the various strategies according to his performance on Oxford's SILL (1990). The information obtained from the SILL supplemented and coincided in several aspects with the one that had already been reported by L.T. in the interview. In effect, the results show that L.T. was highly committed throughout his learning process and used a wide variety of strategies: memory (A), cognitive (B), compensation (C), metacognitive (D), affective (E) and social (F).

A- Remembering more effectively
B- Using all your mental processes
C- Compensating for missing knowledge
D- Organizing and evaluating your learning
E- Managing your emotions
F- Learning with others

1- Never or almost never true of me
2- Usually not true of me
3- Somewhat true of me
4- Usually true of me
5- Always or almost always true of me

L.T. scored the highest in his use of metacognitive strategies (D). According to Anderson (2008), meta-cognition serves as a guide for choosing, monitoring, combining and evaluating approaches for learning languages. Without metacognition to provide direction, learners cannot decide what strategies to use and when to use them. In Cotterall's (2008) view, metacognition is also an essential element of autonomy, that is, the ability to take charge of one's own learning in methodological and psychological terms. L.T. used many different types of metacognitive strategies and so he can be defined, in Cotterall's terms, as an autonomous learner. He arranged and planned his learning, he set goals and objectives, paid attention when someone was speaking English, noticed his mistakes and used the information to help him do better, tried to find as many ways as he could to use his English, planned his schedule so that he would have enough time to study, looked for opportunities to read in English as much as possible, had a clear goal for improving his English skills, monitored his progress and self-evaluated his learning.

The secondly most used strategies by L.T. were cognitive strategies (B). According to Oxford (1990), "cognitive strategies are essential in learning a new language" (p.43). Among the ones he used the most we are: saying or writing new English words several times, trying to talk like native English speakers (which involved practising the sounds of English), using the words he knew in different ways, starting conversations in English, watching English language TV shows and going to the movies, writing notes, messages, letters or reports, skimming passages for general meaning and then reading carefully, trying to find patterns in English, trying not to translate word-for-word and making summaries of the information he hears or reads.

The third most used strategies were social strategies (F), mainly to ask for correction and to empathise with others. For example, if he does not understand something in English, he asks the other person to slow down or say it again, he asks English speakers to correct him when he talks and he tries to learn about the culture of English speakers. L.T. considers that having had the opportunity of living both in the USA and in England for some time gave him a very clear idea of their cultures, and so he could later on reckon which aspects of each culture he most identified with and which ones he admired.

Memory strategies (A) are the ones he used in the fourth place. Although the score was considerably high (3.11), as we will see later, L.T. is not mainly a visual learner, so he rated the strategies that were mainly related to images quite low. The ones related to sounds he rated the highest. For example, he states that he thinks of relationships between what he already knows and the new things he learns in English, he uses new English words in sentences so he can remember them, he remembers new words by remembering the situation in which the word might be used and heoften reviews English lessons.

Affective strategies (E) were rated 2.83. He rated the highest the ones that are more in line with his personality, such as trying to relax whenever he is afraid of speaking the language (lowering one's anxiety) or encouraging himself to speak English even when he is afraid of making a mistake (taking risks). The rest of the strategies cited in this section are either culturally bound (writing down one's feelings in a language learning diary) or simply not appropriate for a corporate environment (giving oneself a reward or treat when one does well in English).

Concerning compensation strategies (C), these were the ones he rated the lowest (2.33). This was, in fact, expected for several reasons. First, he scored very highly in cognitive strategy use, which means that if he had to resort to a compensation strategy to overcome a certain limitation in speaking or to adjust his message, he would resort to the one that was more in line with a cognitive process (using a circumlocution or synonym). He rated this strategy as 4 (very frequently used). It was due to his intensive use of cognitive strategies. For example, his vocabulary increased considerably in the course of one year, because he was constantly using the dictionary and compiling lists of the unknown words he found in books, films and songs. Second, I consider that the compensation strategies that Oxford (1990) lists in the SILL mainly include the ones that learners would use at a low proficiency level (such as using gestures instead of words or making up new words if they do not know the right one). In fact, Dornyei (cited in Brown 2007, p. 138) offers a more comprehensive list of compensatory strategies that includes several others, among them, stalling or time-gaining strategies (using fillers or hesitation devices to fill pauses and to gain time to think) that the oral examiners spotted in L.T.'s performance when he took the BULATS test and that they considered an asset in discourse management. The third reason is related to the second. When L.T. filled in the SILL, he was already in level 5 (C2). Schmidt (1983) and Canale and Swain (1988), believe that semantic and strategic processing are mainly used at low proficiency levels while learners are still working on the structural and syntactic processing that is needed to move to higher levels of proficiency. Learners who keep resorting to this type of strategic and semantic processing and also lack form-focused instruction, tend to fail to develop grammatical accuracy and fossilize. L.T. seems to have favoured structural processing and he also received form-focused instruction to get from level 0 to level 3 in one year. In fact, he did not have much interaction outside the classroom environment until he was sent to the USA to work for one year. By the time he had to start using the language in everyday situations and at work in a foreign country, he was already at level 4 (C1), so he only needed the more refined compensation strategies to communicate effectively, not the basic ones. These are the ones he mentioned in the SILL.

Another question that has been explored is the relationship between L.T.'s use of strategies and his preferred learning style.

L.T.'s learning style preferences
As previously stated, Reid (1998) classifies learners into visual, auditory, kinaesthetic, tactile, individual or group. The following chart shows the results obtained by running Reid's survey of learning styles, that is, L.T.'s major and minor learning styles preferences (see chart 2)

Chart 2 – L.T.'s learning style preferences
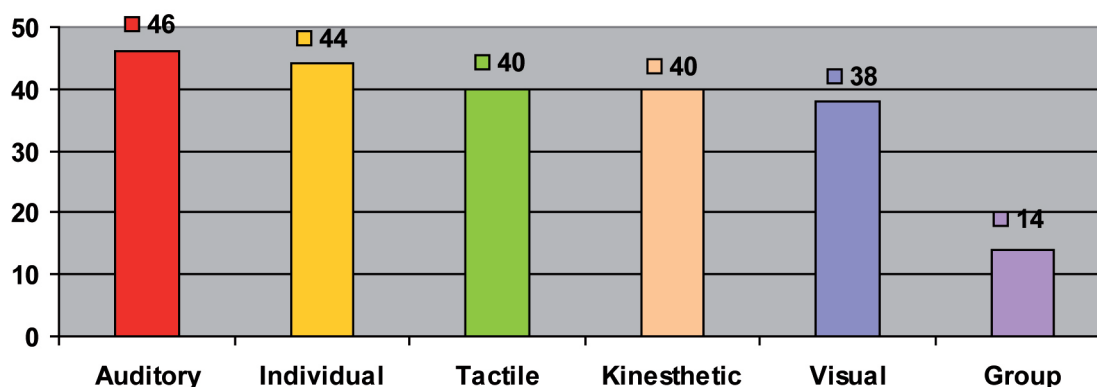
Auditory Major Learning Style Preference (46/50)

   L.T. learns best from hearing words spoken and from oral explanations. He watched movies and listened to songs to remember various the lexical items. He used class time to ask the teacher for explanations, among other activities. He remembers information by reading aloud, especially when learning new material. He benefits from hearing audio tapes and making tapes to listen to. According to Leaver *et al.* (2005, p.68), "auditory learners acquire new information through sound; they hear grammatical endings, and they associate new words with sounds they already know. Even pitch, tempo, and intonation provide them with clues to the meaning of what they are hearing, and they are very quick to learn to make these differences when they are speaking the foreign language". L.T. recorded himself while reading aloud and then he compared his own production to the target language. He was very good at spotting the differences between the sounds he was producing and the target ones, and he recorded himself as many times as necessary until he got the perfect imitation. Imitation worked very well for him. As we will discuss later, in the post actional phase, L. T. was able to go from level 3 to level 5. In my view, his preference for an auditory learning style was highly useful to him during his one-year stay in the United States. He is very sensitive to pitch, tempo and intonation and this full immersion experience may have contributed to his current level of pronunciation, which the examiners found to be near native like.

Individual Major Learning Style Preference (44/50)

   L.T. learns best when he works alone. He thinks better when he studies alone and he remembers information he learns by himself. He understands new material better when he learns it alone, and he makes better progress in learning when he works by himself. In fact, he studied 300 hours on his own plus the 300 hours he studied with the teacher, he was able to go from level 0 to level 3. Evidently this has worked very well for him. He probably wouldn't have profited that much from group classes.

Tactile/ Kinesthetic Major Learning Style Preference (40/50)

   L.T. remembers information better when he writes notes or instructions. He also remembers information well when when he participates in activities and does role-play in class. As L.T. worked in the USA for one year and studied in England for some months before reaching level 5, these "hands-on" experiences may have been very suitable for his learning process because they were in line with his learning style. In class, a combination of stimuli, for example an audio tape combined with an activity, helped him to understand new information thoroughly.

Visual Learning Style Preference (38/50)

   The minor style preference score finishes in 37 and he got 38. This means that he is not highly visual. L.T. usually combined reading with doing (looking words up in the dictionary) or with auditory strategies (he read aloud and recorded himself). That is probably why he got a lower score in memory strategies than in cognitive ones in the SILL questionnaire. The memory strategies in which he got a high score were auditory or kinesthetic ones.

Group Learning Style Preference (14/50)

   This score is very low because he does not learn easily when he studies with others. He has a very high individual learning style preference. The stimulation he receives from group work does not help him learn and understand new information.

As we can see, L.T.'s learning style and the type of learning strategies he used were clearly interwoven. In his study method, he used the type of learning strategies that were mainly associated with his strongest style. The fact that he was having individual classes was also very important, and his teacher challenged him with activities that were also aligned with his style when she gave him listening activities that were far beyond his level at the beginning. She knew that he would listen to the tapes over and over again until he could understand them.

Throughout the actional phase, we have seen that L.T. faithfully complied with what Hylstestam and Abrahamsson (2003) stated about adult second language acquisition in the sense that adult learners have to make "conscious and laboured efforts" to compensate, in Doughty's (2003) view, for the maturational changes that affect cognition.

Part 3: Critical retrospection: post- actional phase
In this last phase, we can see L.T.'s causal attributions to his success. Once more, it is clear that the motivational influences that had a bearing upon L.T.'s learning process have been highly positive in this phase, which has been a crucial one to transform him into a successful adult learner (see Table 14).

Table 14 - Post actional phase

MOTIVATIONAL INFLUENCES	DATA
- Evaluation of action outcomes (self-concept beliefs)	He compared his initial expectations to reality and felt a very strong sense of self-worth and self- confidence because he had achieved his aim I feel that if you speak English no matter how good or bad you are at work you'll be respected. It's a powerful tool. At least here in Argentina people assume that if you speak English you are good. I don't agree but it works. It was helpful when I had to negotiate with insurance companies or brokers Our CEO is an American person (…) and it's very very good to chat with him in his language. It's completely different.
- Forming causal attributions (Teacher's feedback, one's own evaluation)	He attributed his success to his effort, the attention he was able to maintain throughout the process, his self- study method and his teacher : "My attitude. I paid a lot of attention, I made a huge effort to learn the language, I created my own self-study method, and I had a very clear goal, my teacher understood my personality and guided me very well"

- Elaborating a repertoire of action-specific strategies	As the results had a very positive impact on his professional career, this motivated him to study even harder, continue using learning strategies and finally achieve a near-native level of proficiency
	
	    Then, I continued in the company program. The company paid for the classes as a regular policy it was not only for me.
	    Then, when the company stopped the program for some reason I continued taking lessons paid by myself. When I joined this company, I negotiated to include the lessons. I am very conscious that if I don't exercise my English I will lose it.

Through this critical retrospection, L.T. evaluated his learning process, formed causal attributions and by doing so he consolidated his identity as a successful learner. As stated before, according to Leaver *et al.* (2005) self-efficacy leads learners to expect to be as successful in the next stage as they have been in the previous one. Once L.T. had achieved his initial goal, he persisted and continued studying until he reached a very high level of proficiency. He was able to go from level 3 to level 5. In fact, he said he realized that whenever he stopped practising for some time, for some specific reason he began to feel that his performance deteriorated, and that encouraged him even more to continue maintaining and improving the level he had acquired.

To conclude the analysis of these phases, we may draw an interesting comparison between two cases of successful late learners, one in an ESL context and the other in an EFL context. The two cases to be compared are the one of Julie (studied by Ioup, Boustagui, Tigi and Moselle in 1994) and L.T. (the case presented in this study). Julie was a British woman who emigrated to Cairo at the age of 21 and became near native like in a naturalistic environment. An initial aspect they had in common was the fact that both of them were highly motivated. However, we may say that they were motivated in different ways (Julie was integratively motivated because she wanted to become part of the Egyptian society and L.T. was instrumentally motivated because he wanted to get a job). Nonetheless, both of them reached levels of near-native proficiency in the language. What they did have in common was that both of them paid attention to form as well as content and used conscious learning strategies that activated memory processes, which in turn led to rich output. The difference was that Julie had the native speakers in her environment to check with, whereas L.T. had to resort more to books and his teacher. As Brown (2007) had pointed out, instrumentality and integrativeness are not types of motivations but rather orientations, and within each orientation learners may have high or low motivational intensity. Both Julie and L.T. demonstrated high motivational intensity. I agree with Schmidt (1983) in regards to the fact that high integrative motivation, such as in Julie's case, can lead to an increase in pragmatic competence and oral skills in adults but for the development of grammatical competence, cognitive processes will not function automatically, effortlessly and unconsciously. On the contrary, interest and attention to form as well as content are essential for a late learner to achieve overall communicative competence. Julie, in fact, worked very hard on grammatical competence in her self-study, focusing not only on message content but also on message form, and that is probably why, as in L.T.'s case, she also achieved near native like performance.

Canale and Swain (1988) also seem to support this view. They state that if grammatical accuracy receives little attention, some grammatical inaccuracies may tend to become fossilized (i.e. persist over time in spite of further language training), giving rise to a more or less permanent interlanguage, that is, a language system that is suited for an intermediate level of communication but which does not reflect higher levels of L2 proficiency. As a matter of fact, this is even more so in companies. As mentioned before, external circumstances (globalisation among them) force many employees into communicative situations at a stage when their level of English is still rudimentary. Therefore they develop their pragmatic competence and oral skills resorting to compensation strategies and they end up producing a "work English" that falls short of the target language. In L.T.'s case, his aim and interest was to become fully competent. At the beginning, he held an important instrumental motive: a given level of proficiency (level 3) was required for the desired position. However, later on, he was not satisfied with an intermediate level of communicative competence; after all, he had come to this world "to make the difference". In addition, his stay in the United States seems to have fostered integrative motivation in him, as he needed to integrate with the

community to live and work there. He seems to have had, then, different orientations in his motivation in different situations, but he has always shown the flexibility to adapt his learning style and strategies to changing circumstances and, above all, he has displayed motivational intensity, which has contributed significantly to his language development.

Schumann *et al.* (2004) define this type of intensity as "deep sustained motivation". In the case of L.T., his admiration for certain aspects of the Anglo-Saxon culture was useful because he did not have a rejection for the language, but what was really significant in his case was the fact that L.T. made a great attentional effort and devoted a lot of his time and energy to the attainment of his goal. He enjoyed the process very much, challenges were in line with his need for achievement and power, he liked studying and he considered that his success was partly due to his study habits and methods and also to the fact that his teacher had understood his personality and goals and had guided him accordingly. L.T. can be definitely characterized as a "high achiever", a highly motivated person who was well aware of his situation as a late learner and, confronted with a demanding challenge, was ready to face up to it.

From a neurobiological perspective, we may infer that when L.T. evaluated the situation and felt it was going to be rewarding, the network of dopaminergic neurons may have become activated, and as this was sustained through time, synapses may have become stronger as more neurotransmitters such as acetyl-choline were released, enhancing synaptic plasticity (the ability of the connection, or synapse, between two neurons to change in strength), and leading to the creation of more neural networks. As we have seen before, the fact that maturational constraints affect late learning is closely related to the issue of loss of plasticity in the brain. This case may help us understand the learning process from a different perspective: when the adult brain is stimulated appropriately, that is to say when the adult learner is highly motivated, is aware of his/her learning style and focuses conscious attention while using strategies to fix information in long term memory, maturational constraints may be, at least partially, overcome. Furthermore, it might have been also due to this neural plasticity that L. T. could recall information easily and use it appropriately when required, which showed his level of overall communicative competence.

So far we have mentioned many of the factors that may have helped L.T., a late L2 learner, overcome maturational constraints and become successful in the attainment of a high level of proficiency. However, we could mention some limitations of this case study. It may be argued that motivation may be the cause or result of successful learning. Some authors (Burstall and Hermann, cited in Skehan 1989) support the idea that the degree of success of a certain learning process produces different motivational orientations. Other authors (Gardner as cited in Skehan, 1989) consider that motivation is the cause of success rather than its result. Skehan (1989) supports the causal interpretation of motivation because of the quality of research evidence, which is the stance supported in this case study. Another limitation is the construct of aptitude, which was not considered in this study in order to limit the variables under discussion. However, a learning styles survey was implemented to supplement the data on the learner's preferred style. A final limitation is that introspective studies based on self-report questionnaires (SILL and Learning Style Prefer-ences Survey) are constrained to what the subject remembers and believes. Nonetheless, some authors believe that unobservable data can only be found out with this type of instrument.

With respect to future research, as Birdsong and Peak (2008) have pointed out, much more research will be necessary to understand deeply the biology and psychology of motivation and attentional effort so as to transfer that knowledge to practical implications in the teaching-learning process of foreign lan-guages. In addition, the constructs of metacognition, self-efficacy and self-determination or autonomy are also fundamental targets for further research. Teachers may have a crucial role in promoting them among their learners, especially in the case of late learners.

5. Conclusion

This case study has tried to retrace some of the steps leading to the question of late learners' success in the achievement of high proficiency despite maturational constraints. It has attempted to present un-explored ways of addressing the issue of the underpinnings of sustained motivation and attentional effort to overcome said constraints. The case study analysed in this research had posed two questions. One concerned the main motivational influences underlying the subject's motivation in an EFL context. The second entailed the interrelationship among motivation, cognitive aspects of L2 learning and L2 instruc-tion. From the theory reviewed and the analysis of the data, it emerges that:

1) Motivational influences such as self-efficacy and self-determination play a key role in allowing adult learners to successfully accomplish the three motivational phases depicted in Dörnyei's (2001) frame-

work, which are the basis for deep sustained motivation. L.T. had a deeply rooted belief of self-efficacy and showed a very high degree of self-determination to accomplish the pre-actional, actional and post-actional phases that led him to success. He set clear goals, valued the culture of the foreign language he was learning and his family environment contributed to his goal. At the same time, the goal itself (achieving an intermediate level of English) was highly relevant for his job opportunities, given the critical economic situation Argentina was undergoing in 2002. L.T. designed an action plan of 600hs to be accomplished in one year to take him from level 0/A1 in CEF to level 3, put aside competing action tendencies, monitored his own process closely and used strategies in line with his learning style. Finally, he evaluated the action outcomes and formed positive causal attributions, which reengaged his motivation and allowed him to further develop his knowledge and skills until he reached an advanced level of proficiency (level 5/ C2 in CEF).

2) Use of language learning and self-regulation strategies in line with one's learning style is key to the success of the L2 process in late learners. As previously seen, there does not seem to be one learning style in particular that would characterize good language learners, but a characteristic of successful language learners seems to be the capacity to adapt to the requirements of a particular learning task or situation. L.T used many language learning strategies in line with his major auditory and individual learning preferences. The language learning strategies he used the most were metacognitive and cognitive ones. As previously stated, metacognition serves as a guide for choosing, monitoring, combining and evaluating approaches for learning languages. However, he also used some other strategies to meet the needs of particular situations. With respect to self-regulation strategies, L.T. used them to maintain motivation until he was able to achieve his aim. It is interesting to point out, though, that compensation strategies obtained the lowest score. This is coherent with the fact that when he was given the SILL, he was already in level 5. As we have previously seen, semantic and strategic processing associated with compensation strategies are mainly used at low proficiency levels, while learners are still working on the structural and syntactic processing that is needed to move to higher levels of proficiency. L.T. favoured structural processing and received form-focused instruction during his intensive one-year program. He was then inclined to using cognitive strategies more than compensation ones to overcome limitations in speaking. By the time he needed to start using the language in everyday situations, when he was working in the USA, he was already at level 4. Yet, he did use the more refined type of compensation strategies such as gap fillers and hesitation devices as we have seen in the comments of his BULATS speaking test.

3) Attentional focus, the interplay between instrumental and integrative motivation and explicit learning seem to be essential for adult learners to compensate for age-imposed limitations. In this study we have mentioned several cases of successful adult learners. We may conclude that one of the main characteristics of successful adult learning is the fact that it does not happen just implicitly. Explicit learning, focus on form and communicative activities are necessary to store information in long-term memory and to acquire a high level of communicative competence both in an EFL and ESL setting. L.T. received the type of L2 instruction that reflects the above characteristics. Julie, though in an ESL setting, used a similar type of self-instruction to the one L.T. received in an EFL setting. What Julie and L.T. had in common was their sustained attentional focus, and study methods. Both of them were able to sustain motivation and attention until a high level of proficiency was achieved. In L.T.'s case, his self-study method was also in line with the type of L2 instruction described above. When he was working and living in the United States, he was able to put into practice and perfect everything he had learned systematically. His initial instrumental motivation clearly interplayed in this ESL context with his integrative motivation to take him from level 4/C1 in the CEF (Upper Intermediate, the level he was at before his trip) to level 5/C2 (his current level).

4) Variable success achieved in late language learning is closely related to brain plasticity, which is in turn connected with myelination. Myelination delineates learning pathways but, at the same time, with maturation, it reduces flexibility. The gradual loss of plasticity in the different brain areas can explain deficits in late language learners. However, positive emotional appraisal of language learning situations fosters the activity of neurotransmitters such as dopamine and acetylcholine which promote the formation of new assemblies as they enhance synaptic plasticity. Dopamine is released in anticipation of rewarding experiences, and this is related to goal setting and resources assignment in order to obtain a reward. Acetylcholine enhances the hippocampal function associated with memory and its efflux is the result of sustained attention to a task. We assume that L.T. may have released both neurotransmitters when he made the neural connections necessary to take in, process and store information in the brain and retrieve it when he needed to communicate. By doing so, he may have enhanced neural plasticity that allowed him to overturn biological restrictions.

To conclude, as we have seen, adults have the potential to become successful L2 learners; however, not all adults are motivated strongly enough to sustain that motivation until near native proficiency is attained. Successful EFL learners, particularly those in a corporate environment, appear to rely on positively influential motivational factors. However, what makes them stand out from the rest is the intensity and consistency of their motivational force and the way in which these motivational influences interact with varying personal and work conditions. This study has provided evidence on the role of deep sustained motivation and motivational influences, attentional effort, use of language learning and motivational maintenance, appropriate L2 instruction and their neurobiological underpinnings. These factors may interact in such a way that they may help late learners overcome maturational constraints and render them highly proficient.

Today, more than ever, learning has become a lifelong process, and in the era of globalization we are increasingly exposed to the use of English. Yet, at present, companies suffer from a scarcity of financial resources to provide language training courses for all the people that might need them. Therefore, those people who already have the necessary language skills can obtain the best opportunities. The problem of many of those who still do not have the required level lies in the fact that most of them participate in language training programs and yet they reach very low proficiency levels. They spend several years in those programs only to achieve a functional "work English" that meets their everyday needs but that falls short of allowing them to communicate properly in speaking and writing and to fulfil challenging tasks such as participating in international conference calls or negotiating. Research on how to learn most effectively needs to extend across all age groups, but research on cognitive and motivational aspects of L2 adult learning in an EFL setting is urgently required to meet the current demands.

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Appendix 1
Cases of successful adult learners

As we have seen then, there seem to be some exceptionally successful L2 adult learners. This appendix contains other successful cases. Birdsong (2004) argues that there is an observed rate of native –like attainment in many studies concerning L2 performance of adults (5 to 15% of sampling).The following list of studies that provide evidence on this has been taken from Singleton and Ryan (2004).

Author/ year	Type of Test	Subjects	Results
Neufeld (1977)	Oral communication task	A group of 40 late learners of Japanese and Chinese attending courses at the University of Ottawa.	On a 5 point scale, ranging from "unmistakably native" to "learning accented", 9 of the 20 subjects studying Japanese were judged to sound as native speakers and 8 of the 20 subjects studying Chinese scored at native-speaker level
Neufeld (1979)	Oral Communication task	7 Anglophone subjects who studied French as late learners	5 were judged to be native speakers of French by 75% of the 55 French Canadians who listened to the recordings.
Birdsong (1992)	Oral Communication task	20 Anglophone adults learning French in France	15 fell within the range of native speaker performance.
Ioup Boustagui, El Tigi and Moselle (1994)	Grammaticality and oral communication task	2 adult British subjects who learned Arabic in Egypt	Both subjects obtained levels of near-native performance
White and Genesee (1996)	Grammaticality judgement task	Adult Francophones that began learning English after age 12	There were no significant differences with native speaker controls.

Appendix 1 (cont)

Moyer (1999)	Phonetic/ phonological attainment	24 adult Anglophone graduates in German	1 was found to have a native speaker accent. The individual had begun studying German at age 22 and was largely self-taught and fascinated with the German language and culture.
Van Boxtel, Bongaerts and Coppen (2003)	Grammaticality judgement task	40 German and French late learners of Dutch	The results of the test were compared with the one administrated to 44 highly educated native speakers of Dutch. They found that 3 German and 4 French participants were able to attain native speaker performance
Birdsong (2003)	L2 phonological attainment	22 Anglophone learners of French that were resident in France (Mean age of onset 24.5 years)	2 of the subjects exhibited native levels of phonological attainment. Both subjects had high levels of motivation with respect to French learning and both had been trained and corrected in respect to their French pronunciation

The following list of studies has been found in Birdsong (2004)

Van Wuijtswinkel (1994)	Grammaticality judgement task	26 participants (Dutch natives who began learning English after age 12)	8 participants performed like native English speakers
Cranshaw (1997)	Grammaticality judgement task (tense and aspect)	20 Sinophone and 20 Francophone subjects, all late learners of English	3 of the Francophone and 1 Sinophone performed like English native controls.

Appendix 2
Business Language Testing Service (BULATS)
Table 1 - Skills tested: Listening, Reading and Language Knowledge, Oral Production and Writing

Listening	Listening for specific information, completing notes and forms, listening for global meaning
Reading and Language Knowledge	Reading for specific information, knowledge of grammar and vocabulary.
Oral Production	Accuracy of language, range of language, pronunciation, discourse management, interactive communication, overall ability.
Writing	Range of vocabulary and grammar, accuracy in the use of vocabulary and grammar, appropriacy, organization (coherence and cohesion), task realisation (effective achievement of purpose) and general assessment.

Table 2: Summary of typical candidate abilities

CEF	ALTE Level	Description
C2	5-Very Advanced	Research has shown that typical candidates at this level can: ✓ Use the telephone persuasively and effectively ✓ Understand all but the most specialised letters and documents ✓ Put points persuasively when dealing with clients, and speak effectively and at length in meetings ✓ Write most kinds of letters and reports and take dictation on non-routine matters
C1	4-Advanced	Research has shown that typical candidates at this level can: ✓ Use the telephone for most purposes ✓ Understand quickly most letters and documents with some dictionary help ✓ Deal with clients effectively, handling matters outside their own field ✓ Write most letters and reports with few errors

Table 2: Summary of typical candidate abilities (cont.)

A2	1- Elementary	Research has shown that typical candidates at this level can: ✓ Use the telephone for simple messages (e.g. my flight is late. I will arrive at ten o'clock) ✓ State and understand simple messages or instructions ✓ Deal with clients by asking and responding to simple questions ✓ Write simple messages and letters following a standard mode.
A1	0-Beginner	Research has shown that typical candidates at this level may know some phrases

Appendix 3
Interview

Introduction

1. **Can you tell me your full name and how old you are?**
   My full name is L.T. and I'm 33.

2. **Where were you born?**
   I was born in Bahía Blanca.

3. **Where did you spend your childhood? / What's your educational background?**
   I mostly spent my childhood in Bahía Blanca and Campana. I attended a public school in Campana. Then my family and me moved to Río Grande, Tierra del Fuego province. I completed my high school there. Then I moved back to Bahía Blanca and started studying a bachelor in business administration. Then I moved to Buenos Aires by myself and attended a Master in Finance at the Cema University. Then I went to London to study insurance and I'm currently attending a management course at Austral University.

4. **What languages were spoken in your home?**
   Just Spanish.

5. **What's your current job?**
   I have just been promoted to a new position. I'm the Finance Manager of the company.

6. **How old were you when you started learning English?**
   I was 25 years old. I was finishing my university.

Part 1: Choice motivation: pre-actional phase

7. What motivated you initially to start learning English?
   In a way, I had a sort of promise that I had made to my uncle. I have an uncle who works for an international company and he offered me a job but that job required that I should have a command of the English language.
   When he asked me if I had a command of that language and I said "yes, I have very good command of English". The reality was that I had no knowledge of English at that time so I started studying with a teacher three times a week. I wanted to accomplish my promise and to get the job because you remember that during that time, 2001/02, our country was in a very difficult situation so this was very important for me. So I self-generated the commitment to acquire the language so as to get the job as well as to accomplish my promise with my uncle.

8.   What was your specific goal? Was it a one-year gold?
It was a one-year goal. To have the ability to speak English.

8a-   Once you had defined the goal, did you have confidence you would achieve it? Why? What is your personal history of achievement?
In my family, it's very traditional, that the men in the family are successful. My two uncles, my father. He died when I was a child but my mother has always told me that he was a very talented person and that he was a very successful accountant. My two other uncles were both working for very important companies, they were travelling abroad all the time, they had luxurious cars. They were my heroes and they spoke English very well. From the scratch I was boosted by my mother to study at University, to do a post-graduate course, to obtain high qualifications at the high school. Even in sports, I had a focused mentality on winning. I have very low tolerance to failure.

8b-   What was the relevance of the goal? What were the cost-benefit calculation you made?
It was a priority for me. It was a high cost benefit relationship for me. If I hadn't been able to learn as I did, I wouldn't have got the job and I knew that from the very beginning and also the moral promise that I had made. I always keep my promises. My word for me is important as you can see now I told you, ok Lilian please be here at 1.30, we'll go ahead, it's my commitment to dedicate this time to you and to go ahead with this. I mean, my word for me is important, it's like a contract.

8c-   Did you set short-term goals?
I remember I had a pending English test at University that I was attending at that time. I had been postponing that test because I had no idea about the language. In fact, I should have sat for this exam at my early years during university and I was postponing it so I finally ended up sitting for that exam the last year. During that year that I was studying English, I felt confident so as to sit for the exam and I did it in the middle year and I was successful so it was a kind of measure of advance, I mean, I would sit for that and it showed me that I was making progress.

8d-   Was your initial intention to achieve near native proficiency?
No. Well, I was very much helped by my teacher. She was very straight forward. She told me we have only one year, we have to work very hard. Even if I had to go to the bathroom for example, she told me ok. ask me for permission but in English. She forced me to use the language all the time. But I had no measure of how far could I go because I had no idea about the levels intermediate, upper intermediate, nothing. My initial goal was to communicate in English well. I know that in the company I wanted to join, the official language was English so I imagined that at least I had to know how to read and write e-mails or to hold a short conversations by phone.

8e-   With respect to other priorities you had at that time, did you have to stop doing something, did you have to put something aside?
At that time I was studying and working because I used to work for a bank. I remember that in a way I had to put aside some personal things, for example reduce the time to share with my girlfriend or to be with my friends but I tried to put all my efforts both in the work as well as my language studies.

8f-   By the end of that year, did you sit for an exam?
Well, not formally. But my former teacher made me sit for the TOEIC and then I scored intermediate. Then I formed part of the selection process of the company. The moment came and I had to go to the assessment I had to sit for the English test and I passed it. It showed 70% of the needed level. So it was very good for me and I joined the company's trainee program that lasted one year with the possibility of becoming a contractor.

Part 2: Executive motivation: The actional phase

9-   What are your feelings towards the Anglo-Saxon culture, what are your feelings towards American and British people?
I was pretty lucky to be in contact with both cultures. First I went to the US and stayed there for one year working in Dallas, Texas. Then I had the chance to go to London for one month to study insurance. I personally prefer the British culture because they are more sociable, they like very much the human contact, they are quite similar to us in a way. American people, or I would say Texan people are very

closed, they are quite conservative, they are a little bit violent. I would say, they straight forward. What I do like most is that once they had promised something, they had a commitment to do it. They do a lot of planning, they are very clean, they keep everything clean, their city, their cars, their houses. But they don't like chatting, they are very predictable, they act like machines. British people are more human and I love them because they invented all, they have a very old culture, every little place one visits in London is plenty of history and they are very pictorical people, the way they talk, their pronunciation, their music. London is a great city. I admire their cultures, what they do, and we can see results by having a look at their countries and the language is related to that. When confronted with a problem, if you think about it in English you may reach a different conclusion than if you think in Spanish. Different languages reflect a different way of thinking.

9a- **Do you feel identified with their culture?**
I admire some aspects of the culture. I enjoy human contact a lot, I appreciate a lot of sharing life with my wife, with my friends, my family, even at work I have a wonderful relationship with my colleagues. On the other hand, with respect to planning, keeping commitments, being clean, I feel very identified with them. In the street, for example, the respect they show for other people, I feel quite identified with that. If I lived in England or in the USA I wouldn't have any problem adapting to them.

9b- **Do you experience pleasure in knowing more about the culture of the foreign language?**
It's very powerful condiment if you have the feelings of empathy with the culture. I feel   that one that has rejection for the culture, it's very hard to learn the language well.

9c- **Do you like hearing foreign languages being spoken?**
Yes, I enjoy the sounds, the music. In fact I enjoy hearing people talk in other languages, French, Italian but English is particularly beautiful.

9d- **Do you enjoy speaking English?**
I enjoy speaking it but I enjoy more when I can pass the message because when you are abroad and you try to say something and the answer is "say it again please", it's very frustrating because you say: what am I doing wrong ? So I try to say again in a different way, not with the best pronunciation sometimes but I try to pass the message.

10- **How much time did you devote to language study to achieve your initial aim? (e.g. in terms of hours for week).**
I devoted twelve hours per week approximately. I attended the course 6 hours a week and I studied 6 hours on my own.

11- **What language habits or study strategies did you find useful in learning English?**
I did the homework. Then, when I was walking in the street I tried all the time to tell myself what was I doing but in English. Another thing that was very useful for me was to read in English, articles, lyrics and I tried to read and I recorded very voice and listen to myself. I bought a book, something like "Radically changing work challenges", it was like a management book but in English so I tried to read the book and every time I found a word that I didn't know the meaning I tried to go to the dictionary and to put aside the meaning of that word. I bought a dictionary on cd. It was much more practical and it also helped me with my pronunciation. I also used movies.
A very good training for me was to watch the movies. At that time, we didn't have DVD. I tried to rent a movie and I watched it with the captions but for one or two minutes I tried to capture the plot without reading the captions and it was very very useful for me and also I copied the pronunciation, I tried to imitate their pronunciation. Imitation is a key for me. I played the movie once and again. There are words I love. When I like a word I try to pronounce it a lot of times till I get it. I also made notes of the words and the meaning and examples.

11a-**So you watched movies, did you also listen to songs?**
I listened to songs and I tried to pay attention to the lyrics and when I couldn't understand I went to the scripts.

11b-**What did you do to learn grammar?**
In grammar, I was always recommended to buy a book more advanced than my current level. One

book was International Express Upper Intermediate and the other book was one by Michael Vince for proficiency level. It was something like impossible for me because the exercises are very tough. I made a lot of effort to complete that and I enjoyed it very much because I can't stand failing so you give me a challenge and I take it because of my personality.

11c-What did you do to learn to talk?
At that time my contact was only with the teacher. Then, when I joined the company I had the chance to talk with my colleagues and then I had the chance to go to The States and I lived there for one year so that helped me a lot. The experience was very good.

11d-**How did you learn your writing skills? Did you have weekly assignments?**
 Reading helped a lot. With my teacher I had writing assignments every week. First I did simple things and then more complex ones. Then when I was living in the US, I did a lot of writing and at present I do a lot of writing too: contracts, agreements and so on. I pay a lot of attention to words, expressions etc. I'm completely conscious that I acquired the language at the age of 25 so I could lose it if I don't take care of it. It's a tool for me and I feel I have to be careful because every time I pass a lot of time without speaking or reading I have to make an extra effort to catch up. One thing I have to tell you is that since I started studying, my teacher kept telling me was that she couldn't believe I had never studied before. It was something that called her attention.I think the key to success is the time and attention that you devote to it.

Part 3: Critical retrospection: The post-actional phase.

12- **Once you had achieved your initial goal, were you interested in pushing your knowledge towards the target language any further?**
I started when I was 25, I have a problem with this. Then, I continued in the company program. The company paid for the classes as a regular policy it was not only for me. Then, when the company stopped the program for some reason I continued taking lessons paid by myself. When I joined this company, I negotiated to include the lessons. I am very conscious that if I don't exercise my English I will lose it.

13- **Did you experience a feeling of satisfaction when you accomplished difficult exercises in the target language? Did you experience pleasure when surpassing yourself in English?**
I had a strong feeling of satisfaction when I went to the answer key and I realized I had got everything right. It was tough for me when I found that I hade made a mistake but that at the same time motivated me ever further to continue working on it or I made a note and went to my teacher and said I have a problem with this.
With respect to pleasure, a lot of pleasure. I felt powerful when I realized I could go into the internet and read, and understand everything I wanted and also studying in another language. When I was in England I had to study contents to take the exam on legal and insurance issues. It's powerful to feel that you have no limitations because of the language. I know it's not my mother tongue, I have limitations but I can handle them.

14- **What do you attribute your success to?**
My attitude. I paid a lot of attention, I made a huge effort to learn the language, I created my own self-study method, and I had a very clear goal, my teacher understood my personality and guided me very well. She became angry when I made a mistake and I couldn't stand that so I was all the time trying to show her what I could do: I said to myself "so you will see now, you told me off and you will see" but that was very productive to me. Also I think it's a must not to be ashamed of your English, if you have to pronounce well, do it. If you have to put your mouth in a different way, do it. It's a different language, the accent is different, the music is different. If you feel ashamed of speaking the language, it's almost impossible that you acquire the right pronunciation because you will see yourself as a freak: what am I doing or something! I always try to adapt to the context. If there's a bunch of Argentine people speaking English I try to pronounce like them but if you are dealing with a foreign visitor, pronounce well, don't feel ashamed. Thinking in English is very important as well, you have to make the effort to think in English.

14a-What about talent / memory? Are you usually good at remembering things?

If I'm interested in something, I will remember it. I am not a genius, I have regular memory. I don´t think I have a special talent. I made a lot of effort, I had an objective.

15- Can you comment on the social consequences of achieving a high level of proficiency?

My mother was very proud of me. She was telling all her friends, OK look at this! One year ago he had no idea about English and now he can have a conversation in English by phone. It was something like impossible for my mother because, I don't know, she never tried.

Socially when for example I have a dinner or something with someone from abroad and I have the possibility to speak in English you think that other people look at you as if you were something like a freak.

I feel that if you speak English no matter how good or bad you are at work you'll be respected. It's a powerful tool. At least here in Argentina people assume that if you speak English you are good. I don't agree but it works. I was helpful when I had to negotiate with insurance companies or brokers whatever. Our ceo is an American person. This is an Argentine company but the ceo is from Texas, this is to give the company an international profile and it's very very good to chat with him in his language. It's completely different.

My mother always told me "you came to this world to make the difference". That was something that she always told me. Whenever I have a challenge in front of me, I remember that phrase "you are different, you can, you'll be able to overcome that obstacle" and it helps.

Thank you very much L.T.

Appendix 4
Strategy Inventory for Language Learning (SILL) by Rebecca Oxford, (1990)
Version for speakers of other languages learning English

Name: L.T.   Date: May 2009

References: 1: Never or almost never true of me
2: Usually not true of me
3: Somewhat true of me
4: Usually true of me
5: Always or almost always true of me

Part A
1. I think of relationships between what I already know and new things I learn in English. **5**
2. I use new English words in a sentence so I can remember them.**4**
3. I connect the sound of a new English word and an image or picture of the word to help me remember the word.**2**
4. I remember a new English word by making a mental picture of a situation in which the word might be used. **4**
5. I use rhymes to remember new English words. **2**
6. I use flashcards to remember new English words. **2**
7. I physically act out new English words. **3**
8. I review English lessons often.**4**
9. I remember new English words or phrases by remembering their location on the page, on the board, or on a street sign. **2**

Part B
10. I say or write new English words several times. **5**
11. I try to talk like native English speakers. **5**
12. I practice the sounds of English. **4**
13. I use the English words I know in different ways.**4**
14. I start conversations in English. **4**
15. I watch English language TV shows spoken in English or go to movies spoken in   English.**4**
16. I read for pleasure in English. **3**
17. I write notes, messages, letters, or reports in English. **4**
18. I first skim an English passage (read over the passage quickly) then go back and read carefully.**4**
19. I look for words in my own language that are similar to new words in English.**3**
20. I try to find patterns in English. **4**
21. I find the meaning of an English word by dividing it into parts that I understand. **3**
22. I try not to translate word-for-word. **5**
23. I make summaries of information that I hear or read in English. **4**

Part C
24. To understand unfamiliar English words, I make guesses. **2**
25. When I can't think of a word during a conversation in English, I use gestures. **1**
26. I make up new words if I do not know the right ones in English. **2**
27. I read English without looking up every new word. **2**
28. I try to guess what the other person will say next in English. **3**
29. If I can't think of an English word, I use a word or phrase that means the same thing. **4**

Part D
30. I try to find as many ways as I can to use my English. **4**
31. I notice my English mistakes and use that information to help me do better.**4**
32. I pay attention when someone is speaking English.**4**
33. I try to find out how to be a better learner of English.**4**
34. I plan my schedule so I will have enough time to study English. **4**
35. I look for people I can talk to in English. **4**

36. I look for opportunities to read as much as possible in English. **4**
37. I have clear goals for improving my English skills. **4**
38. I think about my progress in learning English. **5**

Part E
39. I try to relax whenever I feel afraid of using English. **4**
40. I encourage myself to speak English even when I am afraid of making a mistake. **4**
41. I give myself a reward or treat when I do well in English. **2**
42. I notice if I am tense or nervous when I am studying or using English. **3**
43. I write down my feelings in a language learning diary. **2**
44. I talk to someone else about how I feel when I am learning English. **2**

Part F
45. If I do not understand something in English, I ask the other person to slow down or say it   again. **4**
46. I ask English speakers to correct me when I talk.**4**
47. I practice English with other learners. **3**
48. I ask for help from English speakers. **3**
49. I ask questions in English. **4**
50. I try to learn about the culture of English speakers.**4**

Appendix 5 : PERCEPTUAL LEARNING-STYLE PREFERENCE SURVEY
By Joy Reid (1984)

References: SA: Strongly agree; A: Agree; U: Undecided; D: Disagree; SD: Strongly disagree.

ITEM	SA	A	U	D	SD
1. When the teacher tells me the instructions I understand better.	X				
2. I prefer to learn by doing something in class.		X			
3. I get more work done when I work with others.				X	
4. I learn more when I study with a group.					X
5. In class, I learn best when I work with others.					X
6. I learn better by reading what the teacher writes on the white-board.	X				
7. When someone tells me how to do something in class, I learn it better.	X				
8. When I do things in class, I learn better.	X				
9. I remember things I have heard in class better than things I have read.	X				
10. When I read instructions, I remember them better.		X			
11. I learn more when I can make a model of something.		X			
12. I understand better when I read instructions.		X			
13. When I study alone, I remember things better.	X				
14. I learn more when I make something for a class project.			X		
15. I enjoy learning in class by doing experiments.		X			
16. I learn better when I make drawings as I study.	X				
17. I learn better in class when the teacher gives a lecture.			X		
18. When I work alone, I learn better.	X				

PERCEPTUAL LEARNING-STYLE PREFERENCE SURVEY (cont.)

ITEM	SA	A	U	D	SD
19. I understand things better in class when I participate in role-playing.			X		
20. I learn better in class when I listen to someone.	X				
21. I enjoy working on an assignment with two or three class-mates.				X	
22. When I build something, I remember what I have learned better.	X				
23. I prefer to study with others.					X
24. I learn better by reading than by listening to someone.				X	
25. I enjoy making something for a class project.			X		
26. I learn best in class when I can participate in related activities.		X			
27. In class, I work better when I work alone.		X			
28. I prefer working on projects by myself.		X			
29. I lean more by reading textbooks than by listening to lectures.		X			
30. I prefer to work by myself.		X			

Name: L. T.