A Possible Self Program for the Foreign Language Class

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Abstract

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In this dissertation, I will present social-cognitive frameworks that support the use of mental imagery for possible self enhancement; and articulate and evaluate a pedagogical intervention designed for the foreign language class. This intervention will allow students to explore and develop prominent and vivid mental representations (self-schemas) of their L2 possible selves (L2 referring to foreign, second language) using guided mental simulation, also called task-guided imagery. The desired aim of this intervention is to help activate students' social cognitive repository in order to elaborate the foreign language part of their self-schemas and thereby increase their L2 competency beliefs and their desire and effort to continue learning a foreign language.

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1 Introduction

Throughout my extensive journey of language learning, I have heard different arguments advocating the study of foreign languages. As a student, the rationale ranged from boosting my standardized test scores and enhancing my economic competitiveness to fostering problem-solving abilities and serving national security interests. Like many high schoolers, I initially embarked on language courses to fulfill mandatory degree requirements. Although the language classroom experience had its enjoyable moments, it was not without its challenges. It presented a mix of difficulties, with comprehension hurdles, embarrassing grammar blunders, and exam errors to resolve. Interestingly, however, none of the incentives that I had been given at the outset was the driving force behind my decision to persist in language study beyond the mandatory requirements or indeed to enroll in a study abroad program several years later. My motivation stemmed from something more elusive, yet profoundly enriching on a psychological, intellectual, and emotional level.

I felt immense satisfaction sitting in language class, relishing the experience of hearing my teacher effortlessly articulate sounds that held no meaning for me yet, and then attempting to replicate those same sounds myself. The sense of empowerment and elation when I finally succeeded in conveying my thoughts making such sounds was unparalleled. It was magic and I was a sorcerer. Unlike other courses, language class felt intimate. It was the only place on campus where I was prompted to talk about myself, describing my emotions, my preferences, and my aspirations. Reflecting on years of investigating language teaching methodologies, I have come to realize that it was the humanistic approach of these classes that truly resonated with me and which nourished both my intellectual and emotional growth.

As a self-conscious adolescent, language class served as a catalyst for breaking through social barriers, fostering effective communication, and forging deeper connections among my peers through our newfound linguistic abilities. This process provided us with invaluable insights into our own burgeoning identities. Coming from a strict, conservative upbringing, learning a new language entailed stepping outside the confines of my familiar social surroundings into a realm of broader understanding by engaging with the unfamiliar (and often suspicious) "other." While initially daunting, this journey has ultimately enriched my life, offering it an improved sense of internal freedom and security.

As eloquently expressed by Tonkin (2002), studying languages allows us "to reach beyond our own social envelopes and appreciate how others are enclosed in theirs" (p. 150). Through this journey, I have learned to embrace both others and myself without fear. I have learned how to smile and remain grounded despite uncertainty and ambiguity, confronted with unfamiliar sounds that I have yet to learn the meaning for.

As an educator, I steer away from asserting the conventional reasons for language learning that I was given. Instead, I emphasize to my students that language acquisition is a transformative journey; it reshapes you, enhances self-awareness, and constitutes a vital component of global citizenship. I stress that beyond being a mere social skill, it equips us with an essential tool in dealing with the increasingly intricate social challenges of our world. Learning a language, I explain, not only fosters understanding of diverse social dynamics, but also deepens our understanding of language mechanics which ultimately shape our thought processes and our stories of self-hood.

To my students who may be feeling disheartened, I reassure them that mastering a language opens doors to transforming their personalities and identities, offering deeper insights into their

own history and culture. For those facing societal challenges, I emphasize how language acquisition can help liberate them from predefined roles, encouraging them to reconstruct their identity narratives and explore new facets of themselves. And for those in more privileged positions, I remind them that learning a language fosters a global perspective, highlighting the arbitrary nature of being born into a culture having linguistic dominance, and encouraging humility in recognizing the value of diversity in human expression. Finally, I want to emphasize that learning a language offers us the opportunity to embody new behavioral and linguistic ways of being, enabling us to express our multifaceted personalities through these alternative perspectives. Learning to express oneself in another language is a highly personalized process that fosters immense intellectual and personal growth.

The motivation to learn a foreign language is as unique and singular as each individual embarking on the learning journey, a fact well understood by L2 educators (L2 referring to foreign or second language) who recognize that students must maintain their motivation and enthusiasm in order to persist in their studies and ultimately reap the rewards of their efforts. These same educators also know that language anxiety and monotony are motivation killers in the classroom and much action research has focused on innovative pedagogical approaches to foster student engagement.

Dornyei and Murphy (2003) point out that the first day of classes often feels like "walking into a party when you hardly know anyone there" (p. 14). In many university courses, students may find themselves quietly taking notes and passively listening, with minimal social interaction required. However, language classes stand in stark contrast to this norm, where active communication and self-expression in a new linguistic framework is required. This shift can be particularly daunting for incoming students who may grapple with academic or social insecurities,

leading to uncomfortable experiences of social and foreign language anxiety. Therefore, the emotional atmosphere cultivated within the L2 classroom significantly influences whether the overall learning experience will be an uplifting and motivating one for students.

Extensive research within L2 teaching methodology has concentrated on identifying instructor best practices, evaluating various instructional methods and techniques to nurture a vibrant, supportive, and inspiring learning environment (Lamb, 2017; Richards & Rodgers, 2014). While crucial for fostering a secure atmosphere conducive to learners' intellectual and emotional development, solely relying on a positive learning environment is not adequate to sustain student motivation (Oyserman & James, 2012).

While L2 instructors hold considerable power in fostering a supportive and dynamic atmosphere in class, an equally significant influence rests within the learners themselves. This part is comprised of the interior emotional landscape which is cultivated by the learner in response to who they believe themselves to be (their identity story) within the language learning context and experience (Dornyei, 2009). This acknowledgment has sparked investigations into ways educators can influence students' inner landscape, with the concept of possible selves emerging as an important theoretical framework for achieving this goal (Markus & Nurius, 1986; Oyserman, Destin & Novan, 2017; Oyserman & James, 2012).

1.1 Our Identity Stories

Each one of us has a story. This story tells who we are and how we became that person. It is born out of our past experiences which are woven into our current selves and provides new stories towards our future selves – who we aspire to become. In order to create new future selves, we produce and project images of ourselves outside of our current context and scope of experiences. We imagine ourselves doing, speaking, and experiencing the new, because defining

the self is more than a static portrayal of who we are today, right now. It is an ongoing narrative with numerous simultaneous possibilities being put forward at any given moment. This dynamic portrait is constantly being retold and revised through our experiences.

It has been recognized for several decades that possible selves can instigate goal-oriented behavior and become a strong source of individual motivation. Interventionist studies designed to promote possible selves and thereby increase motivational behavior have been performed in many different disciplines. In prior decades, language learning motivational research focused on individual cognitive experiences which preserved the Cartesian dualistic view of the individual's inner world reacting to the surrounding social environment. Within these theories, each learner remains separate and distinct from their environment, enveloped in their "self-contained subjectivity" (Harré and Gillett, 1994). One framework that garnered the most attention was Gardner and Lambert's (1972) integrative orientation model which defined language learning motivation as "reflecting a sincere and personal interest in the people and culture represented by the other group" (pg. 132). Over time, however, the concept of integrative orientation and specifically the concept that learners must be willing "to identify with members of another ethnolinguistic group and take on very subtle aspects of their behavior" (Gardner & Lambert, 1972, pg. 135) has sparked debate. Scholars remarked that for many students, strong integrative identification with another linguistic group was unrealistic (McDonough, 1986) and others found little factual evidence that strong or weak integrative motivation was frequent among learners (Clément & Kruidenier, 1983).

More recently, language learning motivational research has turned to examining the more complex and fluid nature between individuals and context, towards complex adaptive systems and non-linear relationships. These dynamic approaches attempt to examine the development of

multiple interacting components which is often characterized by non-linear growth, evolving organically to help shape the surrounding context. A seminal study in this vein was carried out by Dornyei & Csizér (2002) which examined language learner's motivational attitudes over a ten-year span. They concluded that the integrative motivational concept as defined by Gardner and Lambert could be better explained as an internal identification process within the learner's self-concept rather than as affiliation with an external linguistic group. This finding opened the door to looking at the psychological theory of possible selves in relation to L2 learning.

One way to experience possibilities for our future selves is through our imagination. Psychological research has shown that producing mental images of future accomplishments and experiences can augment motivation, achievement, and performance by enhancing our beliefs about our imagined or future possible selves (Oyserman, Bybee, Terry, & Hart-Johnson, 2004; Perunovic & Wilson 2009; Van der Helm, 2009; Weinberg, 2008; Wilson, 2000). For example, in sports psychology, future athletic selves have been bolstered by mentally rehearsing successful sports plays that have resulted in game winnings. Additionally, the medical field has shown that encouraging patients to adopt a healthier lifestyle by asking patients to focus on their best future possible selves has resulted in healthier lifestyle choices (Hickey & Roderick, 2017; Lin, Lin, Ling & Lo, 2021; Morris, Spittle, & Watt, 2005; Morris, Spittle, & Perry, 2004; Williams & Cumming, 2012). In educational psychology, several studies have demonstrated better academic engagement and performance from students in low-income areas by focusing on the development of positive academic possible selves (Leondari & Gonida, 2008; Leondari, Syngollitou, & Kiosseoglou, 1998; Oyserman, Bybee, Terry & Hart-Johnson, 2004; Oyserman, Terry, & Bybee, 2006; Oyserman, Terry, & Bybee, 2002).

1.2 Possible Selves and Motivation

Normand and Aron (2002) have summarized the social psychological research connecting possible selves and goal-oriented behavior. They propose three main characteristics of future possible selves that link motivation towards achievement: availability, accessibility, and perceived control.

Availability or associative distance refers to the ease with which we can mentally construct a future occurrence. Availability is stronger if the simulated imagery is personal, specific, and detailed (McElwee & Haugh, 2010). Ecological frequency of activation strengthens availability. The more often we are prompted to construct images of our possible self, the more clear and elaborate it will become in our mind thereby increasing its strength of association (Norman & Aron, 2003). A vivid and elaborate possible self feels psychologically closer and provides a more concrete conception of its qualities which in turn facilitates identifying actions necessary towards achieving that possible self. (Wilson, 2000). In comparison, an under-defined self cannot provide enough clarity about which goals and actions should be pursued. The easier a possible self is to imagine, and the more detailed and specific it is to our interests, the more available it will be. If a possible self is available, it can influence behavior towards its attainment.

Accessibility refers to how present the possible self is in the working self-concept. If we are aware of the possible self then stimuli related to that possible self are more likely to receive attention increasing its saliency (Bargh & Pratto, 1986; Roskos-Ewoldsen & Fazio, 1992; Wood et al., 2013). Put another way, the more a possible self is activated, the more it is primed to be reactivated and the more important it becomes to the self-concept. More prominent possible selves may then push other self-concept 'contenders' out of the way. The more attention the possible self receives, the more present it is in the individual's social cognitive repository, and the higher its

likelihood to be evoked (Oyserman and Destin, 2010). This increased activation of the possible self renders it more significant and influential on goal-oriented behavior.

Perceived control refers to the belief in personal power to make decisions and act to attain the desired possible self. For this to occur, the goals of the possible self must be seen as credible and plausible (Oyserman, Bybee, Terry, & Hart-Johnson, 2004; Oyserman & Destin, 2010). The belief in ability to organize and perform actions to achieve defined goals (self-efficacy) is an important component of control because it provides us a sense of personal competence. If we feel competent and experience strong self-efficacy beliefs, we will expend more effort and perseverance towards desired outcomes (Bandura, 1997). Some researchers contend that self-efficacy is a better predictive measure of success than prior achievements and skills (Zimmerman, 2000). Belief in our capabilities gives us the control necessary to regulate actions and initiate responses (Bandura, 1986). Higher levels of perceived control correlate with higher levels of motivation (Jewell & Kidwell, 2005; Oyserman and Deston, 2010). We will be more likely to take measures to attain our future possible self if we believe in our ability to do so successfully.

The degrees to which possible selves activate motivation depend largely on how well we have internalized them. (Dornyei, 2009). Visualizations and mental imagery aide the internalization process by increasing conceptual knowledge and feelings of self efficacy which in turn promote possible self development. Once initiated, this recursive process has potential to maximize motivational effect (Hoyle & Sherill, 2006; Reeve, 2018), and is initiated through contrasting – the cognitive process of comparing the current self to a future self. When contrasting takes place, differences between the current reality and the future desired reality are highlighted enabling us to see which actions are needed to facilitate goal completion. Reflecting on these differences helps define a course of action that will close the gap between the current and future

selves, thus enabling behavioral shifts that remove or circumvent obstacles towards reaching the target. This process of evaluating future and current realities, and the resulting actions stemming from it, manifests as a concrete plan in the mind (Oettingen, 1996). The more time spent mentally performing future goals successfully, the more vivid, present, and likely that future possible self becomes and the more likely it will drive motivational behavior.

1.3 The Imagination and Self-Schemas

The self-concept is a construction of affective-cognitive responses and beliefs about the self which help us make sense of self-relevant experiences (Markus & Sentis, 1982). These self schemas which are derivative from past experiences, play a major role in how past, present, and future identities are formed. All information about the self is filtered through these schemas in a dynamic and adaptable process which continuously updates for potential future self development. Possible selves are formed in context to our hopes and desires for the future, but also to our fears and outside expectations. They are influenced by the social, cultural, and historical context that surrounds us. Our imagined interactions within mentally projected environments give form to our future self-schemata which can exist as ideal selves (who we strive to be), feared selves (who we are afraid of becoming), or expected selves (who others want or expect us to be, and that we may come to share as expectations).

A significant line of social cognitive research has explored the idea of employing one's future self-concept as a potential motivator towards goal achievement, with much of this work focusing on the link between motivation and future possible selves (Aubrey & Nowlan, 2013; Dornyei & Csizer, 2002; Hoyle & Sherill, 2006; Kim, 2009; Taguchi, 2013; Taguchi, Magid & Papi, 2009). In the same way that we use lived experiences as a tool for self-definition, we use the imagination as an essential place to envision future events and negotiate future identities. In

simulating experiences outside our immediate physical or temporal context, we rehearse actions and behaviors which in turn become self-knowledge (typically cognitively codified as self-schemas). Put another way, we 'try-on' future selves. These mentally simulated experiences provide information about who we could become, how we would behave or feel in certain situations, or whether we would fail or succeed (Taylor, Pham, Rivkin, & Armor, 1998).

Our mental simulations connect us to images and feelings related to our goals (Dornyei & Kubanyiova, 2014). When we imagine doing something, we experience the action and feel emotionally involved. Studies in neuro-imagery technology have demonstrated that the brain processes imagined events and actions in much the same way as actual ones (Decety & Grèzes, 2006). This finding is important because it suggests that envisioned performance of an action can allow us to incorporate the experience into our self-schema incrementally, much as if the action had been performed.

Mental imagery can be focused on goal attainment where we see ourselves having achieved a specific goal, such as walking across a stage in regalia and mortar to receive a diploma. It can also target the underlying processes involved in reaching a goal, such as mentally rehearsing suturing techniques before a surgery. Negative imagery, where undesirable consequences are evoked, is another possible focus. In these instances, fears are brought to bear on certain courses of action that the individual can then strive to avoid (Dornyei, 2009).

1.4 Task Imagery and Mental Simulation

When considering mental imagery, researchers distinguish between daydreaming and task imagery. Where daydreaming is spontaneous nonworking thought that is often fanciful and without direction, task imagery employs a disciplined, focused thought towards a goal. In task imagery, participants are instructed to fix their imagination on specified scenarios in a purposeful

and directed way. Task imagery has been shown to have a greater impact than daydreaming on motivational behavior (Klinger 2012). In contrast to the thought-drift experienced in daydreaming, directed perceptual and cognitive activity tends to crowd out undirected thoughts unrelated to the goal-pursuit, and provides a closer conscious mental association between the specific goal and the positive feelings that arise from imagining attaining that goal – further reinforcing goal-oriented behavior (Klinger, 2012).

Additionally, task imagery often involves mentally simulating the process required to achieve a goal. Purposefully imagining these steps helps assess which real-world actions need to be taken and directs focus towards carrying them out. This mental rehearsal makes it more likely to initiate and complete tasks successfully (Knauper, Roseman, Johnson, & Krantz, 2009; Markman & McMullen, 2003; Oettingen, Pak, & Schnetter, 2001). Guided simulations have been used in psychotherapy to help patients overcome their fears (Hall, Hall, Stradling, & Young, 2006), to increase physical exercise habits in adults (Murru & Ginis, 2010), and with musicians to help overcome stage-fright (Finch & Moscovitch, 2016). Individuals who undergo task imagery intervention report feeling more capable of achievement and experience a boost of self-confidence (Callow, Hardy, & Hall, 2001; Mamassis & Doganis, 2004; McKenzie and Howe, 1997).

As mentioned above, the connection between mentally simulated activity and real motor activity is born out in neuroimaging studies which show that virtually all of the brain areas that plan and control actual motor actions are coincident with those that plan and control imagined motor actions (Decety & Stevens, 2009; Jeannerod & Frak, 1999; Porro, Francescato, Cettolo, et al., 1996; Roth, Decety, Raybaudi, Massarelli, et al., 1996). Mentally simulated actions are able to stand in for physically executed actions and increase performance using the same neural mechanisms which allow actual observation to increase performance (Brass, Bekkering,

Wohlschlager, and Prinz, 2000; Brass, Bekkering, and Prinz, 2001; Brass, Zysset, and Cramon, 2001; Castiello, Lusher, Mari, Edwards, and Humphreys, 2002; Edwards, Humpreys, and Castiello, 2003). It is this neural connection between imagined activity and real activity that makes task-guided imagery so powerful a tool in developing our perceived abilities, and consequently, our possible identities.

1.5 Possible Self Attainment

Social cognition theory provides a framework to understanding the mechanisms involved in possible self attainment. According to this theory of human behavior, we are self-reflective beings who develop self-belief systems allowing us to exercise control over our thoughts, feelings, and actions (Bandura, 2012; Schunk & Pajares, 2002). Self-reflection is an important part of developing self-schemas because beliefs about the self exert influence over what we hold true about who we are, what we can do, and who we can become. When imagined future selves are elaborate and vivid, perceived as possible, and are coupled with strategies and action plans, they have a self-regulatory effect, motivating us to adopt behaviors to collapse the distance between our current self and the future self we are striving to become. Imagining ourselves performing successfully provides increased feelings of self-efficacy which act upon our self-schema and increases future effort and perseverance positively (Boyatzis & Akrivou, 2006; Frazier & Hooker, 2006; Murru & Ginis, 2010). Knowledge of the successful performance can then be activated into working memory and applied in decision-making around self-identity, goal setting, and behavior (Bandura, 2012; Honicke & Broadbent, 2016; Schunk & Pajares, 2002).

One of the reasons that possible self interventions are so attractive for educators, administrators, and researchers is that, unlike aptitude, possible selves can be theoretically augmented within the right context and generate beneficial changes in goal-oriented behavior. In

this paper, I will present social-cognitive frameworks that support the use of mental imagery for possible self enhancement and articulate a pedagogical intervention designed for the foreign language classroom. This intervention will allow students to explore and develop prominent and vivid mental representations (self-schemas) of their L2 possible selves using guided mental simulation, also called task imagery. The desired aim of this intervention is to help activate students' social cognitive repository in order to elaborate the foreign language part of their self-schemas and thereby increase their desire and effort to learn a foreign language.

1.6 The Pedagogical Intervention

The situations presented in the task-guided imagery assignments are designed to promote availability and accessibility of the student's L2 possible self and are therefore founded in real private and professional experiences I encountered while living overseas as a young adult. Stories anchored in daily activities, such as sitting in a café or going to the grocery store are more applicable than those of becoming a professional athlete or rockstar. The goal of setting up realistic storylines is to decrease the associative distance between the possible self and the learner (Norman & Aron, 2003) because it is crucial that future possible selves remain plausible and available to the student (Oyserman, Bybee, Terry, & Hart-Johnson, 2004; Oyserman & Destin, 2010).

Additionally, the scenarios evoke process-related content, as opposed to outcome-only content, which emphasizes the steps taken to achieve the desired outcome. Research shows that process-driven simulations are more effective at goal achievement because they specifically relate to problem-solving activity and planning. This helps individuals gain procedural knowledge towards realizing their aspirations because attention is trained on simulating the necessary steps to reach the goal (Klinger, 2012; Knauper et al. 2009; Pham and Taylor, 1999).

Each interventionist exercise asks students to put themselves into a relaxed state of mind and guides them through a particular imagined scenario that occurs in the foreign language. After the mental simulation has ended, students are asked to write a reflection in the language of instruction (English for students in the United States) on what they experienced by describing their visions in detail, their feelings about what occurred in the imagined event, and how they felt about their language ability. The written reflection serves as an intentional space for them to self-reflect and consolidate their thoughts and feelings around possible L2 self-schema expansion.

1.7 Implications of the Study

The significance of this project lies in the pedagogical implications of providing a tool that activates and enhances student self-schemas in a positive manner by harnessing an innate human characteristic – purposefully guided imagination. There is a body of research demonstrating that increased possible self development contributes to better academic performance, sustainability of learner effort, and increased feelings of self-efficacy in students (Dornyei & Csizér, 2002; Leondari & Gonida, 2008; Oyserman, Brickman, & Rhodes, 2007; Oyserman, Terry, & Bybee, 2006; Oyserman, Coon & Kemmelmeier, 2002; Ryan 2009; Taguchi, Magid, & Papi 2009). Saying this, there are several gaps in the current literature with respect to L2 motivation research. Firstly, there is a dearth of studies that measure changes in possible selves over time pre- and post-intervention. Secondly, while foreign language educators can control exposure and use of the L2 in class, they are often at a loss at how to affect *individual* student motivation positively. Therefore, there is a pressing need for applied educational tasks/tools that have been translated from theory. Finally, I have not found a study that explores the exportability potential of an academic possible self intervention across different classrooms, institutions, and student bodies. I hope to be able to respond to these needs in the present study.

Furthermore, employing the potential of the imagination in this way is firmly grounded in the realities of the language classroom. Learning a foreign language is more than "the gradual acquisition of discrete items of language…it reflects the desire of learners to expand their range of identities and to reach out to wider worlds" (Norton & Pavlenko, 2007 pp. 670). It is a process of 'becoming' that acts upon one's identity through mental and emotional processes. Successfully imagined L2 performances contribute to student expectation of future success and new L2 self-schemas. Foreign language students often have little or minimal opportunity for actual contact with native speakers, therefore the imagination remains a key means through which students can enhance their motivation through augmented L2 self-schemas. Stimulating the increased motivational potential and performance of students while allowing them to experience new identity formations is a win-win scenario in any pedagogical toolkit.

The use of mental imagery as a learning tool has not yet been widely used in classroom curricula. Most educators outside of research contexts are not yet aware of this aspect of the learning experience. It is my aim to provide accessibly written synthesis of underlying theory and examples of pedagogical applications that can be flexibly applied across teaching domains.

2 Literature Review

The literature on possible selves has burgeoned since it was first put forth by Markus and Nurius (1986). Due to the large expanse of publications on possible selves, practical considerations favor a focused review of the literature in which I would like to address the following questions:

1. How have possible self constructs been defined?
2. How do possible self constructs impact motivation?
3. What is the role of mental imagery in possible self development?
4. How have possible selves been operationalized in the literature?
5. Can possible selves be augmented through intervention?
6. Is there a demonstrated relationship between possible selves and perceived competency beliefs?

Additional Concepts

In addition to the questions above, I will briefly present the following concepts which appear in the qualitative data analysis, each holding significant relevance to the development of L2 possible selves:

- L2 private speech
- L2 language egos
- L2 motivational orientation

2.1 How have possible self constructs been defined?

The theory of possible selves, pioneered by Markus and Nurius (1986), has emerged as a crucial framework for understanding psychological motivation. This is because possible selves represent cognitive representations of the self-concept, shaped by both past experiences and future aspirations. They encapsulate enduring goals, aspirations, motives, fears, and threats. Possible

selves are diverse, encompassing visions of what individuals aspire to become, desire to become, and fear becoming. They evolve through individual and social influences and are constantly being refined and revised. They are domain-specific and the extent to which they are developed varies among individuals. Moreover, possible selves are context-dependent and can be associated with specific actions and behaviors.

Present identity is intricately interconnected with past experiences and future aspirations. It transcends current thoughts, emotions, and behaviors, and is shaped by past reflections and future visions. We know from medical research that the self-concept is intricately tied to memory because patients who suffer from amnesia, Alzheimer's disease, or severe head trauma where there is a loss of autobiographical memories have reported feeling a loss of sense of self. (Albert, 1977; Conway & Pleydell-Pearce, 2000; Klein, 2015; Schacter, Chiao & Mitchell, 2003). In the same token, personal memories and past recollections help constitute identity narratives and impact who individuals think they can become in the future. These past selves, which shape present identity, continue to exert a profound influence on aspirations for the future.

In their groundbreaking paper, Markus and Nurius (1986) distinguish three primary categories of possible selves: the "ideal selves," embodying our utmost aspirations; the "could-become selves," depicting a default scenario based on our current path; and the "feared selves," representing the undesirable outcomes we dread. Ideal selves symbolize our highest aspirations, while feared selves serve as a cautionary reflection of potential failure. Could-become selves, on the other hand, mirror our most probable future based on our present trajectory. Notably, ideal selves and feared selves often serve as guiding forces, sometimes referred to as "future-self guides" in the literature (Asker, 2012; Kubanyiova, 2015; Feng & Papi, 2020; Dornyei, 2014).

Higgins (1987) expanded the possible selves concept in his self-concept discrepancy

theory. According to Higgins, the capacity to evaluate these different selves is pivotal to their functioning, because it is through a self-appraisal process that one becomes aware of disparities between the current identity and the envisioned future identities. Higgins contends that perceived gaps between present and future selves elicit negative emotions, which in turn serve as motivational catalysts, prompting individuals to modify their behavior to bridge these gaps. This drive to reconcile discrepancies serves as the motivational mechanism, elucidating how possible selves translate into purposeful, goal-directed behavior.

For possible selves to drive action they must be a part of one's working self-concept which Markus and Nurius (1986) define as "the set of self-conceptions that are presently active in thought and memory". Naturally, all available possible selves cannot be present within the mind at the same time. The components related to a particular possible self arise as they are made salient by the immediate social context (Oyserman & Destin, 2010). In this way the relevant possible self becomes activated in the person's working self-concept and impacts goal-oriented behavior. Multiple possible selves can vie for influence in one's awareness, competing for attention. The easier a possible self is to evoke, the more accessible it becomes, raising its "activation potential" (Higgins, 1996, p. 134). When the activation potential of a particular self is high, stimulus information related to that knowledge structure will become more prominent and attract more attention. The more attention that is paid to it, the more influence it will have on behavior. In this light, possible selves may be seen as self-regulatory as they 'give rise to behavioral standards against which current self-representation is compared and with which it is reconciled through behavior' (Hoyle and Sherrill, 2006, p. 1687).

Self-regulation, however, does not stop at the point at which current selves and future selves become reconciled because future selves are constantly being renegotiated and revised.

Carroll, Sheppard, and Arkin (2009) examined the tendency for individuals to lower the expectations set for their future selves as they confront failures, anxiety, and self-doubt. This phenomenon, termed *downward revision*, is predominantly observed where there is a strong likelihood of failure in reconciling the discrepancy between actual and desired selves. The implications here for student motivation are evident.

2.1.1 Possibles Selves and Language Learning

In 2009, Dornyei proposed an L2 motivational framework called the Second Language Motivational Self System based on possible self theory. Dornyei explains that the integration of fantasy and imagination is a central component to future possible selves (also Markus, 2006) because it is the dream of the desired future that is the core element of a future self. These dreams coupled with Higgins' self-discrepancy theory exemplifies individual motivation as people strive to match their current selves to their future-self guides. Dornyei (2009) lays out the L2 Motivational Self System comprised of three parts (p. 29):

1. the Ideal L2 self: this is the L2 schema of the ideal self which is a powerful motivator to learn an L2; this self is concerned with the discrepancy gap between L2 current self and L2 future self; traditionally contains integrative and instrumental motives, if they are internalized.
2. the Ought-to L2 Self: which is the L2 schema of the ought self, this self is learning an L2 to meet outside expectations and to avoid possible negative outcomes; this self is comprised of someone else's sense of what attributes the learner should possess and corresponds to extrinsic and instrumental motives.
3. the L2 Learning Experience: which encompasses motives connected to the immediate learning environment and experience (e.g. the influence of the teacher,

the curriculum, the other students, etc.); this component can serve to support or to undermine the Ideal and Ought-to L2 selves.

This third component can be conceptualized as external where the L2 ideal and ought-to selves are internalized components of the L2 Motivational Self System.

2.2 How do Possible Self constructs impact motivation?

The cognitive revolution in psychology during the late 20th century redirected focus of motivational theory away from unconscious instincts and emotions, and towards the conscious mental processes of the self. Bandura's social-cognitive theory sheds light on human behavior through these cognitive processes of the self which comprise our goals, expectations, beliefs, and how we interpret our 'self' within the given social environment. Our interpretations of these interacting elements influence our behavioral decisions. Put another way, these mental processes inherently involve not only thoughts by the self, but specifically about the self, where motivation to act can be explained by one's beliefs and perceptions shaped by past or present experiences, or envisioned future selves. As we strive to achieve our envisioned future selves, learning and developing specific skills or competencies becomes crucial. In these instances, self-efficacy beliefs become significant because we are less likely to pursue self-schemas that include abilities we believe we cannot attain or develop (Bandura, 1998).

Oyserman and Destin (2010) contend that for possible selves to have a strong motivational impact on learners, specific prerequisite conditions must be met. The first condition is that these possible selves must be active within the individual's working self-concept. When the working self-concept is engaged, there is increased likelihood that an individual's emotions and behaviors will be swayed towards goal-directed actions. Secondly, possible selves need to be sufficiently developed in the learner's mind. The clearer and more detailed they appear, the more cognitively

available they are (Norman & Aron, 2002). A vividly envisioned future self feels psychologically pertinent to the learner, thereby exerting a more significant influence on goal attainment behavior (Wilson, 2000). Moreover, individuals who frequently contemplate their future selves are inclined to embrace positive possible self-images while discarding negative ones (Oyserman and Markus, 1990; Oyserman, Terry, and Bybee, 2002). Possible selves that are concrete conceptions allow learners to easy identify the actions needed to achieve that possible self. An under-defined self cannot provide enough clarity about which goals, and in parallel which actions, should be pursued.

A third condition requires that possible selves be credible and plausible. Possible selves offer a glimpse into what individuals perceive as attainable, as they represent "ideas about what is possible for the individual to be... and as such are an end state to strive for or to avoid" (Cantor et al., 1986, p. 99). According to Oyserman and Destin (2010), possible selves must be viewed as feasible and within one's reach to have self-regulatory action, and thus motivational influence.

Plausible possible selves, when combined with strategies and action plans, exert a self-regulatory influence. This provides individuals with a tangible roadmap for bridging the gap between their current and desired selves. Merely possessing mental images of desired selves is insufficient on its own (Oyserman, Bybee, Terry, & Hart-Johnson, 2004). Self-regulatory possible selves are more apt to impact behavior when "they represent a self-defining goal and include specific behavioral strategies for pursuing that goal" (Hoyle and Sherrill, 2006, p. 1677). In contrast, possible selves without goal pathways, while fostering positive emotions within individuals, are less likely to shape behavior because they are not associated with identifiable actions.

Fourthly, a disparity must exist between the actual self and the possible self to impact behavior. Without acknowledging this discrepancy, there is no impetus for change toward the

future self. Research by Van Dellen & Hoyle (2008) demonstrates that comparing the current self with the wished-for possible self prompts goal-oriented action in individuals. The desired possible self instigates a self-appraisal process through which discrepancies are identified between it and the current self. The desired possible self helps to organize the individual's will, directing it towards behavior that will close the gap between the current and desired future self. This increased self-monitoring provides feedback in terms of progress being made toward this goal. As positive appraisals are made, an enthusiastic emotional state is felt and is associated with the specific cognitive processes that take place when the future desired self is being shaped and nourished. The desire to maintain this positive affect further increases action and behavior, through self-regulation, towards becoming the preferred future self, yielding further positive self-appraisal and affect. This iterative process is the motivational mechanism behind possible self theory (Boyatzis & Akrivou, 2006).

Additionally, Oyserman and Markus (1990) discovered that the motivational potency of possible selves is heightened when comparisons are also directed towards feared selves. Feared selves serve as a potent motivational tool by emphasizing the potential consequences if goals are left unaccomplished. Feared selves are a powerful mechanism behind motivation as they place emphasis on what can happen if goals are not achieved.

Finally, for possible selves to effectively motivate behavior, they must be aligned with other established social identities within an individual. Thomas, Townsend, and Belgrave (2003) discovered that students in economically disadvantaged areas of Baltimore, Maryland, exhibited a diminished orientation towards doing well in school because positive academic performance was not congruent with other more established in-group social identities. Factors such as poor grades, high dropout rates among peers, discriminatory treatment from teachers, peer pressure to

disengage from academic pursuits, and a lack of adult role models exemplifying the rewards of obtaining an education, were crucial in perpetuating these roles. For these students, fostering positive academic selves felt incongruent with their social identity, hindering their ability to envision and pursue more successful academic futures (also see Nasir, 2012). In these instances, promising interventions have favored promoting congruence between in-group identities and positive academic possible selves (Aronson, 2021; Destin & Oyserman, 2010; Oyserman, Bybee, Terry, 2006; Treisman, 1992).

2.2.1 The Social Aspect of Possible Selves

Engaging with our immediate social milieu shapes the dimensions of our future selves and brings them into focus within our working self-concept. The clarity and complexity of possible selves are heightened through exposure to diverse future possibilities within our social circles (Nasir, 2012). Our self-perceptions are refined and clarified through social exchanges with others, shaping our values and beliefs about ourselves and the world around us. Within these interactions, individuals can assess the feasibility and achievability of their envisioned selves within the current context. Recognizing the existence of a discrepancy necessitates seeking validation and feedback on these possible selves from the social environment (Carroll et al., 2009).

Social environments in which individuals think play a crucial role in shaping both the content of their thoughts and the interpretation of that content. This emphasizes the constructive nature of cognition, suggesting that individuals are attuned to their surroundings and adjust their thoughts and actions to what is contextually relevant. Thus, motivation originating from self-schema development is socially situated cognition (Oyserman & Destin, 2010). A particular social context can cue possible selves and the norms, values and goals associated with them (Oyserman, Bybee & Terry, 2006). Destin & Oyserman (2010) found that the study behavior of

eight-grade students differed depending on whether they had been immersed in an education-independent or education-dependent context. Those who associated future income potential with attaining higher educational levels studied more and completed extra credit assignments compared to those students who linked future income potential to athletics or becoming an entertainer. For the education-dependent students, their adult possible self was associated with continued study and academic diligence, therefore, they were more likely to plan and engage in completing schoolwork.

Interaction within social contexts is required for the possible self motivational mechanisms to occur. Connection with our immediate social environment informs the facets of our future selves and brings these to our attention in the working self-concept. Clear and elaborate possible selves emerge in relation to exposure of various possibilities of future selves in the social environment (Nasir, 2012). Visions of our selves are advanced and clarified through social interaction with others, which refine our values and beliefs about ourselves and our world. Through these interplays, individuals can determine what is plausible and possible to achieve within the constraints of the current context. Recognizing that a gap exists involves seeking evidence and validation of the possible selves. All of this requires feedback from the social environment (Carroll et al., 2009).

2.2.2 Possible Selves and L2 Motivation

Research indicates a strong correlation between the ideal L2 self and integrative or intrinsic motivation (Taguchi, Magid, and Papi, 2009; Ryan, 2009), with the L2 learning experience significantly influencing the sustainability of learner effort (Csizér and Kormos, 2009). Dornyei's L2 Motivational Self System has been extensively examined in both quantitative (Csizér and Kormos, 2009; Yashima, 2009; Al-Shehri, 2009) and qualitative studies (Aubrey and Nowlan,

2013; Kim, 2009; Lamb, 2007, 2009, 2011; Campbell and Storch, 2011; Taguchi, 2013), all of which confirm the significance of the possible self framework in L2 motivational research. Importantly, Dornyei emphasizes that the internalization of an L2 possible self can vary in intensity among individuals, and that L2 motivation is determined largely by the extent to which learners have internalized their future self-images (Dornyei, 2009; Kim & Kim, 2018; Kong et al., 2018).

While the L2 self might initially emerge from external obligations (the ought-to self), over time, the motivational influence of the ought-to self can transition into the ideal self as the motivations for language learning become more deeply integrated into the individual's identity. The ideal L2 self evolves as learners expand and refine their future selves through visualization and mental imagery—a cyclical process that continuously enhances motivational impact (Markus & Cross, 1994).

Ryan (2009) observed that L2 ideal selves proved to be a more accurate predictor of learning effort than integrative motivational levels, especially when language acquisition was perceived as a means of personal fulfillment and social engagement rather than solely an academic pursuit (also, Taylor, 2012). The capacity for students to self-evaluate and monitor their progress toward their L2 selves played a vital role in their motivation. Those who had honed their self-critiquing ability with a view to gauge their perceived progress over time were better equipped to establish clear learning goals linked to the cultivation of their L2 possible selves (Lyons, 2014). In a separate study, robust L2 selves were correlated with heightened joy, motivation, and achievement in L2 writing proficiency, whereas ought-to selves were associated with increased L2 writing anxiety (Tahmouresi & Papi, 2021). Several recent studies have highlighted the relationship between an enhanced willingness to communicate in the L2 and advancements in L2 possible self development (Lan & Woo, 2021; Yashima, 2009; Lee & Lee, 2019). It is believed

that the L2 self stimulates a desire for L2 proficiency, which in turn mitigates hesitancy and anxiety in L2 communication.

L2 possible selves have also been associated with self-regulation in L2 learning, demonstrated by students setting individualized L2 learning objectives and participating in activities that nurtured their L2 identities (Borkowski & Thorpe, 1994; Dornyei & Ushioda, 2009; Kim & Kim, 2014). Self-regulatory learning strategies, such as managing emotions linked to classroom boredom, sustaining task engagement, and adhering to L2 learning objectives, were notably more prevalent among students with well-established L2 identity frameworks who felt empowered to autonomously pursue learning beyond the classroom (Csizér & Kormos, 2014; Lyons, 2014).

The learning environment in second language (L2) acquisition also influences the prevalence of L2 possible selves and motivational intensity. Ushioda (2011) highlighted that "classroom practices promoting autonomy are likely to foster the socialization and consolidation of adaptive values, identities, and motivational pathways" (p. 22), highlighting the important role of immediate social interactions in shaping a positive L2 self. Another element with direct implications for classroom dynamics is the phenomenon of language anxiety experienced by some students when speaking in front of others in class. Interestingly, Edwards (2006) and Kang (2005) observed that students tended to feel less anxious speaking aloud in front of peers whom they perceived to have similar L2 proficiency levels. Interestingly, these students tended to mislabel their peers as more L2 proficient, leaving them with the fear of being judged. This finding suggests that learners may tend to evaluate themselves more critically than their peers—a factor with clear ramifications for self-efficacy beliefs and L2 possible self development.

2.3 What is the role of vision and mental imagery in possible self development?

The Oxford Dictionary defines vision as "the faculty or state of being able to see; the ability to think about or plan the future with imagination and wisdom; and an experience of seeing someone or something in a dream or trance, or as a supernatural apparition" (2014). Vision plays a crucial role in the development of possible selves as it is essential for individuals to envision their future selves and to mentally experience the theoretical consequences of actions taken towards or against achieving the future self.

Psychological researchers emphasize the significance of personal vision in the process of goal development and achievement. According to Van der Helm (2009), "Vision emerges or is cultivated within personal development endeavors. This vision is closely tied to imbuing life with meaning, facilitating career transitions, and self-coaching towards realizing personal aspirations" (p. 98). Van der Helm views vision as encompassing the ideal, the future, and the determination to make changes. Through vision, individuals can decide upon a preferred future and maintain activities that orient them towards it. Thus, vision plays a powerful role in generating and directing change.

If we define L2 motivation as being influenced by a learner's vision of their potential future self, then it stands to reason that performance and motivational intensity are, in part, reliant on the learner's capacity to generate mental imagery (Sheikh, 2002). Mental imagery refers to the creation of cognitive representations through visual, auditory, olfactory, and/or tactile senses (Weinberg, 2008). While imagery can be rooted in past experiences, it can also be employed to construct imaginary scenarios through internal perceptual experiences (Finke, 2014). Intertwined with vision, imagery constitutes a common human phenomenon often exemplified in daydreaming, where individuals conjure mental images to reenact past events or bring into consciousness experiences that have not yet occurred.

Mental imagery may focus on goal achievement where an individual sees themself accomplishing a certain goal, such as receiving their diploma during a graduation ceremony. It may also target the processes involved in reaching a goal, such as mentally rehearsing a performance. Negative imagery where undesirable consequences are evoked is another possibility. In these instances, fears are brought to bear on certain courses of action that the individual can then seek to avoid (Dornyei, 2009).

As in the possible self framework, future imagery needs to contrast with present reality to drive motivation and lead to the formulation of plans for goal attainment. By contrasting the future goal with current circumstances, individuals perceive that maintaining the present reality is an obstacle to achieving their future aspirations. Consequently, strategies develop within the individual's will to direct behavioral change, progressing towards the desired outcome. (Oettingen, 1996). If imagery is to be motivational effective, it must also not be too temporally distant in the mind of the individual. The closer the imagined success, the more likely it will impact behavior. This idea follows research conducted on mental simulations of distant future selves, which were reported as seeming more like "strangers" to individuals, making them challenging to connect with. Conversely, proximal future selves were perceived as "friendly" and "familiar", possessing more motivational power (Perunovic & Wilson, 2009).

2.3.1 Task Imagery

Researchers differentiate between daydreaming and task imagery. Daydreaming entails unplanned, aimless, nonworking thought characterized by fanciful ideas. In contrast, task imagery involves deliberate and purposeful mental engagement toward a specific goal. Unlike daydreaming, task imagery demands disciplined focus and directed attention to specific elements of a scenario.

Task imagery has been shown to have a greater impact than daydreaming on motivational behavior (Klinger, 2009), with researchers suggesting that it can shape courses of action through its affective and cognitive influence. Deliberately envisioning future events enables individuals to gain emotional, conceptual, and procedural knowledge of the event as they evaluate which actions to take to perform a given task, observe themselves mentally executing the task, and then experiencing the emotional outcome of having done the task.

Moreover, task imagery helps learners maintain focus and renders the imagery more salient, as their concentration on the task tends to displace non-directed, intrusive thoughts that are common during daydreaming. As a result, individuals who employ task imagery are more likely to initiate and successfully complete similar tasks in real-life settings (Knauper et al., 2009). Since positive imagery can bolster perceptions of competence and self-efficacy, individuals undergoing task imagery interventions also express heightened beliefs in their capability and self-confidence afterwards (McKenzie & Howe, 1997).

2.4 How have Possible Selves been operationalized in the literature?

Packard and Conway (2009) performed a meta-analysis of 141 studies of possible self research operationalized in the field of psychology and found four methodological approaches that predominated. The main methodologies used were surveys and interviews. These were followed more rarely by the analysis of participant mental visualizations, and enacted possible selves through dramatic choreography. Likert-scale survey instruments predominated as the tool used in the first method. Card sorting and list-generation of possible selves were also included in the first category. The narrative method involved interviewing subjects about their possible selves, their visions of the future, and examining what social phenomena wrought differences amongst possible selves (Ruvolo and Markus, 1992; Gibbons et al., 1993; Lips 2007). Visual methods consisted of

asking participants to construct their own images of their possible selves, and dramatic methods asked subjects to act out their possible selves within differing contexts (i.e. in class, at home, on the job).

Amongst these methods, two participant questionnaires stand out due to their direct and simplistic nature. The first, based on a social-cognitive approach, was an Academic Possible Selves Questionnaire published by Oyserman (last updated in 2019). The measures focus on next academic year expected and feared possible selves and organizes coding from levels 0-4, from vague or generalized participant statements to specifically vivid statements or statements indicating strategies towards realizing their future self. One weakness of this instrument is its potential lack of contextual data, which if not coupled with qualitative interviewing, could leave the researcher with a restricted view on the role that social interaction plays in the development of these selves over time.

Another scale crafted by MacIntyre, Mackinnon, and Clément (2009) evaluates L2 possible selves as a driving force behind L2 integrative motivational orientation (refer to section 2.7.1.3 for motivational orientation). Drawing upon Markus and Nurius (1986), this scale gauges the motivational orientation of these L2 selves by asking participants to assess the presence and desirability of L2 self characteristics both in their current and future L2 selves. The researchers consider that an L2 self lacking future desirability is not emotionally reinforced and will unlikely have a motivating effect. Additionally, the scale exmaines the perceived plausibility and activation frequency of the L2 self, reasoning that an improbable possible self will likely be thought of less often and therefore have minimal impact on motivation. A notable weakness of this instrument is its reliance on researcher-determined attributes of an L2 self, which may constrain students and fail to capture more personalized motivations for L2 self development if used alone. This

instrument coupled with qualitative interviewing would provide more contextual information, allowing researchers to gain a better understanding of how learners choose to developed their nascent L2 selves and what they experience emotionally and cognitively in terms of their motivation as their L2 selves grow.

2.5 Can possible selves be augmented through intervention?

Several interventionist studies have explored the correlation between possible selves and academic attainment (Oyserman, Terry, & Bybee, 2002; Oyserman, Terry, & Bybee, 2006; Sheldon et al., 2006; Oyserman and Markus, 1990). Enhanced development of academic possible selves has been associated with increased perseverance in completing school assignments and, predictably, enhanced grades (Leondari and Gonida, 2008). The literature underscores that prioritizing the cultivation of positive academic possible selves contributes to improved academic performance and heightened feelings of self-worth and self-efficacy among students (Oyserman, Brickman, and Rhodes, 2007; Oyserman, Terry, & Bybee, 2006; Oyserman, Coon, and Kemmelmeier, 2002).

A pivotal study conducted in a low socio-economic school district unveiled a connection between students' self-perception and their willingness to engage in academic endeavors and achieve success. Oyserman and Destin (2010) devised an intervention termed School-to-Jobs, aimed at assisting students in recognizing their potential and anticipate positive future trajectories. The program asked students to participate in various activities aimed at: helping them acknowledge their positive academic accomplishments, fostering a favorable academic self identity, selecting adult role models exhibiting academic success, recognizing obstacles, and devising strategies towards attaining their positive academic identities. After two years of participation in the study, the findings revealed that students had a broader array of possible selves available to them, which

correlated with academic accomplishments. Students showed increased initiative and confidence in note-taking and completing homework assignments on time. The intervention, geared toward nurturing positive academic self-identities, significantly impacted the improvement of academic outcomes for these students.

Another intervention study, conducted by Oyserman, Terry, & Bybee (2006), aimed at exploring the link between possible selves and self-regulatory behavior. Their findings revealed that possessing a favorable academic possible self was insufficient in itself to maintain self-regulatory behavior towards obtaining positive academic outcomes in school if: (i) the possible self was incongruent with important in-group social identities, (ii) academic difficulties encountered were interpreted as evidence that the goals were unattainable, or (iii) students' social environment did not encourage the development of strategies for obtaining the positive academic self. Conversely, they discovered that students were able to sustain self-regulatory efforts toward cultivating a positive self-image when the possible self was integrated into behavioral strategies and supported by the social context, when it felt congruent with significant in-group social identities, and when academic difficulty encountered was normalized. In this study, learner academic achievement and grades improved, as well as scores on standardized tests. Moreover, participants reported a reduction in feelings of depression, and managed to maintain the self-regulating behavior for a duration of 2 years post treatment.

2.5.1 L2 Possible Self Development

L2 possible self interventions are gaining traction in the field of language acquisition, with most research aimed at exploring methods to increase student motivation to continue learning the language. In one research project conducted by Fukada, Fukada, Falout, and Murphey (2011), Japanese students participating in an English class undertook various elicitation exercises aimed

at enriching their L2 possible self-images. One activity asked students to brainstorm their envisioned L2 career selves and subsequently share them as an in-class L2 speaking activity with peers. Weeks later, a compilation list of these envisioned L2 career selves was generated for the class and students were prompted to reflect aloud on whether their 'dream job' was represented. Another activity involved students mapping their L2 social networks at the beginning and end of the quarter, with an emphasis on cultivating new connections with classmates to bolster their L2 selves.

Fukada and colleagues focused on enhancing L2 selves through classroom interaction, with peers playing a crucial role in collaboratively constructing L2 future selves. Articulating their aspirations verbally not only strengthened them, but also facilitated the exchange of constructive feedback. The L2 classroom, with its abundant peer role models, offers an ideal environment for educators to facilitate activities aimed at L2 possible self development. The premise is that observing peers aspire to L2 future selves serves as a potent model and motivator for other students to aspire similarly. Additionally, this study observed a significant relationship between L2 possible self growth and what was termed the *antecedent conditions of the learner* (ACL). The ACL encompasses the experiences and background that shape students' beliefs regarding their L2 capabilities for the future, a concept closely related to Bandura's definition of self-efficacy.

Following Fukada and colleagues (2011), Sampson (2012) found that activities prompting students to reflect on their L2 possible self images strengthened these images and appeared to increase their motivation to continue learning. Both studies used in-class sharing activities that were meant to boost L2 students' possible selves. In the Fukada study, simply asking students to reflect on their self-narratives around past successes and failures (Antecedent Conditions of the Learner or ACL) helped them to see where they were unintentionally limiting themselves by their

belief systems. These students were then able to adopt more positive self-narratives by realizing that belief systems are socially constructed and therefore malleable. Learners also discovered that they were able to create new positive experiences and feel more in control of their learning by sharing their possible L2 selves with their class peers. Building on this, Sampson (2012) observed that in-class social sharing of learners' L2 possible self images created a "meta-messaging" effect among students which reinforced their L2 motivation and brought an increased awareness of self-regulation in language learning. Both studies concluded that the increase in L2 possible selves resulting from the intervention, correlated with higher investment in their L2 learning.

Another noteworthy study explored students' ability to formulate an L2 ideal self based on their preferred learning styles (visual, auditory, kinesthetic). Al-Shehri (2009) found that students who demonstrated proficiency in imagery and showed a preference for visual learning exhibited more advanced L2 ideal selves and attained higher scores in L2 motivation compared to their peers. He posited that learners with a visual learning preference also experienced an increased imagery capacity rendering their L2 ideal selves easier to evoke.

Magid (2014) devised an L2 selves intervention program inspired by Oyserman, Terry, & Bybee's (2002) School-To-Job Programme, which aimed to assist students in cultivating positive academic selves by establishing short and long-term academic goals and linking them to corresponding strategies for attainment. Magid observed a significant increase in the strength of participants' L2 ideal selves, with 80% of students putting in more time and effort to their L2 learning, post intervention.

Finally, Campbell and Storch (2011) discovered a correlation between student motivation to persist in language learning and positive L2 learning encounters. Where the learning experience was favorable, learners perceived language study as personally satisfying and enhancing their

economic competitiveness after graduation. Crucially, they concluded that negative learning encounters could be weathered if the L2 self remained strong, intact, and viable. The notion that resilient possible selves can alleviate adverse emotions stemming from negative learning experiences is compelling and warrants deeper investigation.

2.6 Is there a demonstrated relationship between possible selves and perceived competency beliefs?

Perceived competence or self-efficacy, refers to an individual's belief in their ability to perform well within a specific domain at some time in the future (Bandura,1998). These beliefs therefore represent future-oriented conceptions of the self which may be shaped if the sources of these beliefs are nurtured (Pajares & Urdan, 2006). Such competency beliefs are intricately tied to the development of possible selves, as individuals must first believe in their capacity and skills to achieve such future identities before considering them.

Possible selves have been linked with self-efficacy beliefs across various domains. In the field of medicine, Murru and Ginius (2010) discovered that an intervention aimed at promoting physical exercise routines boosted participants' feelings of self-efficacy as well as the formation of possible selves in this context (also, Strachan et al., 2017). Brady (2011) assessed the effectiveness of an Employee Wellness Program focused on advancing employees' personal goals and observed that evoking possible selves tended to enhance self-efficacy beliefs related to personal goal attainment. In the Educational field, Schlegel and colleagues (2019) observed significant increases in STEM possible selves and self-efficacy beliefs among high school students over a two-year span when modifications were made to the science curriculum to make it more interactive, engaging, and conducive to generating feedback to students on their abilities.

Research on the construct of self-efficacy in the realm of language learning has gained prominence as scholars turn to social-cognitive models to deepen their understanding of L2 motivation and achievement. These inquiries have produced compelling evidence of the relationship between L2 self-efficacy beliefs and L2 proficiency among learners (Graham & Weiner, 1996; Graham, 2006; Hseieh & Kang, 2010), particularly when students employ efficient metacognitive strategies to monitor their language learning progress (Mills, Pajares & Herron, 2007). A qualitative finding by Irie & Brewster (2014) revealed self-efficacy beliefs to be a forerunner of envisioning plausible L2 future selves. Similarly, a study involving 236 Polish high school students identified a strong correlation between L2 self-efficacy and L2 possible selves (Iwaniec, 2014). While offering compelling evidence of the collaborative role of these two variables in enhancing student motivation, further investigation is needed to deepen our understanding of how these relationships unfold over time in the language learner's journey.

2.7 Additional Concepts

The following concepts emerge within the qualitative data analysis of the present paper and are thus briefly introduced here to provide readers with an overview of their significance and relevance to the development of L2 possible selves.

2.7.1.1 The use of L2 private speech

In the context of language learning, *private speech* refers to the verbalization of thoughts, feelings, or instructions, typically in a self-directed manner and not intended for communication with others. Individuals verbalize in the foreign language to themselves as they practice various language skills. This could include speaking aloud while reading a text, practicing pronunciation, speaking to oneself aloud, or mentally rehearsing conversations in the target language. This phenomenon does more than reinforce vocabulary, grammar, and pronunciation; it allows the

learner to explore speaking in the L2 without the pressure of immediate feedback or judgment from others, which can boost confidence and fluency over time. Overall, it is a valuable tool for self-regulation, practice, and reinforcement, contributing to the development of language proficiency and confidence.

Zhou and Papi (2023) observed a correlation between the use of private speech and the advancement of L2 possible selves. They found that students with stronger L2 possible selves tended to dedicate more private effort to enhancing speech clarity and reducing 'accentedness' in their speaking. The speech gains were attributed to proactive engagement and extensive participation in L2 communication driven by the achievement goals associated with the learners' L2 possible selves. Private speech serves as a method to experiment with the language, hear its resonance in one's own voice, and contemplate a future L2 self where fluency is attained. The literature in this area is recent, but more research in this area could yield valuable insights into its contributions to the development of self-schemas.

2.7.1.2 L2 Language Ego

There is a Czech proverb which says "one who speaks only one language is one person, but one who speaks two languages is two people." The meaning behind this saying expresses that language and identity are intertwined and when one learns a new language, a new identity in that language is formed. As people acquire proficiency in a foreign language, they undergo a transformative process, shaping a fresh identity characterized by novel cognitive, emotional, and behavioral patterns. This identity evolves gradually through active engagement with the new language. In the pursuit of mastering a second language, learners immerse themselves in unfamiliar linguistic constructs and communication styles which are absent in their native tongue. These encounters are thought to catalyze the formation and growth of an L2 language ego, defined as the

existence of a different 'self' in the foreign language. This psychological phenomenon is based on the idea shared by many language learners that they feel like a different person when speaking the L2 and often act differently as well (Guiora & Acton, 1979).

Research indicates that learners possessing a positive L2 language ego tend to acquire the language more effortlessly, demonstrating a willingness to refine their pronunciation by adjusting their speech patterns (Ibrahim, 2008). Furthermore, individuals exhibiting a developed L2 language ego identity, tend to experience a greater receptivity to cultural assimilation (Keeley, 2014; Zakarneh, 2018).

While I have not discovered any studies evaluating the coexistence of L2 language egos with L2 self development, the striking similarities between these two concepts are evident. When learners engage in the multifaceted dimensions of a new language, there often emerges a desire to reshape a new identity that aligns with the new linguistic environment (Cummins, 2006; Galectcaia, 2018; Guiora, 1994; Norton, 2013). In an experimental approach, participants in the pilot study of this paper were asked about their perception of any shifts in their personality, akin to adopting a different persona, when conversing in French (or any other language) compared to their native language. This informal exploration aimed to unveil the emergence of an L2 language ego concurrent with the development of L2 possible selves. Given the lack of empirical confirmation for this connection, the insights provided in this study should be viewed as complementary to discussions on possible self development rather than fundamentally constitutive of it.

2.7.1.3 Motivational Orientation – integrative or instrumental

In the context of language learning, instrumental motivation refers to the drive to learn a language that arises from external factors or rewards. These might include tangible rewards such

as grades, praise from others, or the prospect of a promotion or better job opportunities that come with language proficiency. Instrumental motivation can also stem from outside social pressure or expectations from family and friends (Gardner, 2004, 2010).

Integrative motivation, on the other hand, is driven by internal factors and personal satisfaction derived from the learning process itself. Learners who are integratively motivated find joy and fulfillment in the act of L2 learning and using the language. They most likely have an emotional identification or genuine interest in the language, its culture, or the communication opportunities it provides. Integrative motivation often leads to sustained engagement with the language and a deeper level of proficiency over time (Gardner, 2004, 2010; Ryan, 2009).

The literature suggests that the motivation behind possible selves is typically integrative, driven by internal desires, aspirations, and personal values (Ames & Archer, 1988; Blumenfeld, 1992; Dweck & Leggett, 1988; Hock et al., 2006; Ryan, 2009). Individuals are motivated to pursue or avoid certain possible selves based on their intrinsic desires for self-improvement, fulfillment, and well-being. These motivations often stem from psychological needs such as autonomy, competence, and relatedness, as highlighted in intrinsic motivation theories like self-determination theory (Deci & Ryan, 1985). Students driven by integrative motivation view learning as a means to acquire skills and knowledge that enhance self-efficacy in *personally* valued goal areas. Consequently, they are more inclined to make the psychological investment necessary to attain these goals (Bandura, 1982; Cook & Artino, 2016; Fredricks et al., 2004).

The correlation between integrativeness and L2 possible selves suggests that these two items may be resonating equally in terms of emotional identification towards the values of the language and its speakers (Dornyei, 2005; Ryan, 2009). While instrumental factors may influence the pursuit of possible selves to some extent (e.g., societal expectations or cultural norms), the

primary motivation underlying possible selves is one aligned with personal values, growth, and fulfillment (i.e. integrative) (Norton, 2020).

Although external rewards may provide initial incentives for L2 learning, fostering integrative motivation through activities that align with learners' interests, values, and goals can lead to deeper engagement and more meaningful language acquisition experiences (Dornyei, 2009). Instrumental motivation can initially spark interest and effort in learning; however, it may not sustain learner engagement over time if integrative motivation is lacking (Gardner, 2004, 2012).

3 Pilot Study Research Project

3.1 Introduction

I first encountered the concept of Possible Selves theory during my tenure as a French instructor at a mid-sized community college in the Pacific Northwest. Community colleges tend to attract a diverse demographic of students due to their proximity to students' homes and flexible course options. Many of my students held part or full-time jobs, were from immigrant families, and had off-campus responsibilities which left them with minimal time to contemplate future visions and possibilities for their own identities beyond their daily commitments.

The idea of integrating low-stakes intervention activities in the classroom, leveraging foreign language use to empower students to transcend preconceived identity narratives or embrace previously unimagined identities, held profound significance for me as a language educator. My aspiration to catalyze positive transformations in students' future identities within a condensed timeframe (the few quarters I had them in class) became the driving force behind the conceptualization of this focused pedagogical intervention. Therefore, I set out to design, implement, and assess a series of activities and reflective exercises aimed at augmenting student L2 possible self development and bolstering their motivation to persist in foreign language study.

The outcomes of this pilot study are the inspiration for the primary PhD research project, driven by the curiosity to determine if the positive results I obtained in the pilot could be replicated in other pedagogical settings, across classes with different instructors and varying student language proficiency levels.

3.2 Pilot Study Research Design

3.2.1 Approach

The purpose of this mixed methods pilot study was to develop and test the effectiveness of a pedagogical intervention to enhance L2 possible selves in college students. This intervention incorporated L2 possible self exercises designed to stimulate students' exploration and contemplation of their L2 possible selves. The main objective was to engage their social cognitive repository, encouraging them to expand this aspect of their self-schema, thus fostering a heightened motivation and commitment to ongoing foreign language acquisition. Quantitative methods were selected for their objectivity and the capability to establish an observational metric. Concurrently, qualitative data was gathered to offer a more comprehensive understanding of the numerical results and to contextualize the findings within the broader social, cultural, or environmental context. The study employed an explanatory sequential design because it allowed me to gather quantitative and qualitative data at different times throughout the investigation. This approach was chosen out of practical necessity, as I was the sole researcher for the study and the only French instructor for all six classes involved.

3.2.2 Research Questions

The hypotheses that guided the pilot study were:

Research hypothesis 1 (RH1): Research has shown that possible self interventionists exercises have demonstrated efficacy in cultivating possible selves, particularly in the domains of art, sports, and medicine. I hypothesize that the implementation of such exercises within the context of foreign language learning will lead students to express greater levels of development in their second language (L2) possible selves after completing the interventionist activities, surpassing their pre-treatment assessments.

Research hypothesis 2 (RH2): Possible selves are theorized to translate aspirations into behavioral strategies and intentions within their respective domain. I hypothesize that students who articulate well-developed second language (L2) possible selves will also convey heightened levels of motivational intensity, characterized by the desire and effort to persist in their foreign language learning journey.

3.2.3 Participants

Participants in the pilot study were 128 students enrolled in first-year French language courses at a mid-sized community college in the Pacific Northwest from fall 2020 to spring 2021. The study was conducted in six separate courses: two first quarter French classes (level 101), four second quarter French classes (level 102), and one third quarter French class (level 103). All students in the class were sampled and all were subjected to the intervention.

3.3 Pilot Study Methodology

3.3.1 Pilot Study Instrumentation and Measures

A self-reporting survey was developed in order to measure several variables, some of which are outside the scope of the current study (e.g. student preferred learning style). The survey items that assessed the two variables of interest in this trial study, L2 Possible Self development, and Motivational Intensity, were sourced from the same instruments as for the main research study presented in this paper; notably, MacIntyre, McKinnen, and Clément (2009) for L2 Possible Selves, and Robert Gardner (2004) for Motivational Intensity.

All questionnaire items were adapted from instruments that had been used in previously published research to enhance the probability that the survey maintained regular psychometric attributes and had reliable and valid coefficients. Perceived Competence, the third variable examined in the main research study, was not measured in the pilot project. The survey consisted

of 35 items and were based on a 7-point Likert scale ranging from 1 (entirely disagree) to 7 (entirely agree), including a neutral measure 4 (neither disagree nor agree).

Table 1 Pilot Study Survey Multi-Item Scale and Reliability Information

Variables	**No. of items**	**Cronbach's Alpha**	**Sample Items**
L2 Possible Self - adapted from an existent measure developed by MacIntyre, McKinnen, and Clément (2009)	20	.91	- I see myself being able to act like a French person one day. - Developing friends with French people is a desire of mine.
Motivational Intensity - adapted from Gardner's Attitude Motivation Test Battery (2001)	5	.77	- I don't pay much attention to the feedback I receive in my French class (negatively worded). - When I have a problem understanding something in my French class, I ask my teacher for help.

3.3.1.1 L2 Possible Self

Possible selves are cognitive representations that we have of their potential or envisioned future selves. These representations encompass the various roles, identities, and accomplishments we aspire to achieve or fear becoming; and, they encompass personal, professional, social, and other relevant life dimensions (Markus & Nurius, 1986). A key objective of this pilot study was to evaluate the evolution of second language (L2) possible self development over time, with a dedicated set of 20 survey items for this assessment.

3.3.1.2 Motivational Intensity

A crucial objective of the pedagogical intervention in this study is to ignite student motivation, fostering a sustained commitment and effort in the learning process. Motivational intensity is defined as the strength and determination an individual employs in pursuing a goal or objective (Gardner, 2004). To gauge shifts in student motivational intensity regarding their dedication to learning French, a set of 5 items was incorporated for this measurement.

3.3.1.3 Semi-Directed Interviews

Semi-structured interviews were programmed for qualitative data collection toward the end of each quarter. An interview protocol and prompt were developed in order to help guide the interview topics with the aim of exploring more fully student responses to the survey questions. Approval to conduct the pilot study was secured from the Human Subjects Research Divisions of both my doctoral institution and the community college. As part of this approval, all potential self-activities were designated as homework assignments. Furthermore, the participation in interviews was voluntary, as it was impractical to expect students to be available outside of regular class hours.

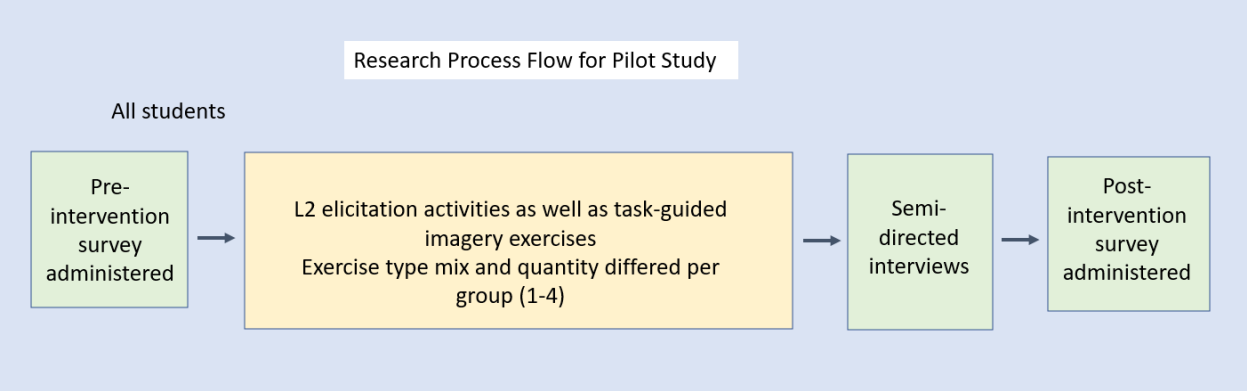
3.3.1.4 Demographic of Sample

There were initially 128 university students who were enrolled in French courses participating in the study; however, a total of 43 students were excluded from the study for not having completed both the pre- and post-intervention survey or at least 50% of the possible self exercises. The remaining participants were 44 women and 41 men between the ages of 18-67 years old ($M_{age} = 23.3$, $SD_{age} = 10.6$).

3.3.2 Pilot Study Data Collection

At the beginning and end of each academic quarter, all students were assigned a survey to complete as homework. Throughout the quarter at regular intervals, possible self activities were assigned and varied in number and type from class to class (please refer to table 3). It is important to note that there was no control group, and all students partook in the intervention.

Table 2 Pilot Study Research Process Flow



My initial intent was to have all possible self activities take place during regularly scheduled class times so that students could gain feedback and be stimulated by exchanging results with others in the class. This social sharing activity would help to solidify their L2 possible selves and fuel individual motivation and enthusiasm to learn French (Fukuda, Fukuda, Falout, & Murphey, 2010; Sampson, 2012). However, a few weeks into the first course, Covid-19 confinement measures closed campuses across the state. Thus, all activities were removed from an in-class to an online environment where they remained for the duration of the pilot study. Students were therefore administered online surveys (except for the first class which had a pre-intervention paper survey) which collected demographic data (name, gender, and age) and measured the baseline of their L2 possible self and motivational intensity.

Following this initial survey, students were assigned possible self development activities as homework on the online learning platform and were given full credit for submittals completed on time. Encouraging responses were provided by me, the instructor, to each student's written reflection in order to support and reinforce L2 possible self development (Kubanyiova, 2015; Wilson & Linville, 1985, 1982). In addition to my online comments, I arranged informal voluntary video sessions via Zoom weekly. These sessions served as platforms for discussing various class topics in a relaxed atmosphere, fostering a sense of camaraderie. Originally organized as an instructor office hour, they evolved into social gatherings where students could connect with each other during the Covid-19 lockdown. While these sessions were not recorded, attendees frequently engaged in discussions about the task-guided imagery exercises, sharing experiences and often laughter. Since these exercises were referred to as "French self" activities online, students adopted this term and often discussed their "French self" experiences together.

In addition to the online class sessions and informal 'office hours,' semi-directed interviews were conducted with each student during the last three weeks of the quarter, which allowed me to further probe their responses on the initial survey and their written reflection pieces from the task-guided imagery assignments. Interviews were carried out via the Zoom application, recorded, and lasted around 20 minutes each. The final week of the course all students were again administered the survey online via the learning platform.

3.3.2.1 Instrumentation Timing

The pre-intervention survey was accessible during the initial two weeks of the quarter, after which it was closed. The possible self survey and related assignments were integrated into the overall class homework and often coincided with other vocabulary and grammar tasks. Due dates

were assigned and any submissions made after the due date were designated as 'late' with points deducted accordingly.

The post-intervention survey was available during the final two weeks of the quarter and had to be finished prior to the final exam. At the end of the quarter, all survey data and homework submissions, including the qualitative written reflections, were collected from the learning platform, and securely stored on a server. It is worth noting that class homework constituted 45% of the total class grade, which may have contributed to the study's participation rate; 65% of students engaged in enough of the possible self activities to remain in the study despite the academic and personal disruptions caused by the Covid-19 pandemic.

3.3.2.2 Qualitative Data Collection

Qualitative data for the pilot study were derived from semi-structured interviews conducted towards the end of the quarter, either in person or via video conference. These follow-up interviews allowed me to ask students in-depth questions based on their written responses to the activities. It is important to note that participation in these interviews was voluntary, as not all students were available outside of class time. The interviews were recorded and typically lasted approximately 20 minutes each. The interview protocol and a sample of questions can be found in the Appendix.

I opted for a semi-directed interview style using an interview guide instead of a pre-formatted and heavily-structured interview schedule. The list of formulated questions functioned as a framework for the research interview, with variations in the exact wording and order across interviews. I prioritized maintaining the question's meaning rather than its wording. This more relaxed approach favored adapting the wording and style to match the energy and cadence of each interviewee and allowed me to pursue a more natural line of inquiry with each student without being overly prescriptive or distracting. Maintaining the appearance of a relaxed atmosphere for

the students during the interview process was important so they would feel encouraged to respond candidly despite the power dynamic between the researcher and the participants.

At the start of each interview, I read the introductory interview protocol paragraph, explaining that I was conducting enquiries about "university students' experiences with studying a foreign language" and "how learning a language affects how students feel about themselves." I then asked them permission to record the interview and reiterated that the interview data would remain confidential without any identifying information being used. After this reminder, the interviewees were asked questions designed to explore their experiences learning foreign languages, their motivation, and their possible selves. Additional probing questions were also asked to clarify or gain better understanding of their responses in some instances.

During the interview sessions, students were asked probing questions based on their survey responses, as well as inquiries pertaining to three key concepts related to the development of L2 possible selves: their engagement in private L2 speech, the existence of an L2 language ego, and their motivational orientation (for detailed explanations of these concepts, please refer to section 2.7).

3.3.3 Pilot Study Possible Self Intervention Exercises

Ultimately, the pilot study incorporated two distinct types of possible self exercises. I initiated the pilot intervention by introducing elicitation-based exercises, drawn from published research. Examples include activities like creating an ideal self tree (Magid & Chan, 2012) or having students submit a personal photo illustrating "what motivates me to learn French" (Fukunaga, 2016). At one point, I even encouraged students to design business cards depicting their future life in France, as if we were attending a class reunion a decade later (Fukuda et al., 2011). These activities prompted students to contemplate their future aspirations related to the

French language. Building on the findings of Fukuda, Fukuda, Falout, & Murphey (2011), which demonstrated that student motivation and commitment to the language learning process were heightened through peer discussions about their language learning aspirations, I began the pilot study by allocating class time for students to engage in discussions with their peers regarding their responses to the activities. When the course moved online due to campus shutdown, weekly informal zoom sessions were held where students could continue to share their reflections with each other.

Over time I noticed a significant drawback to the elicitation exercises — they depended on students' existing knowledge and experiences with French and language learning. Some students, especially those with limited exposure to foreign languages and travel, encountered challenges with these exercises. In certain instances, I found out that students had opted for French class as an alternative to another more preferred language class (e.g., Spanish), which was already at full enrollment. Paradoxically, I became aware that some students had minimal to no intention of learning and using French beyond my classroom. Individuals in such situations lacked the motivation needed to complete the elicitation exercises with conviction.

This challenge led me to develop the second category of exercises used in the pilot study - task-guided imagery. In my reading, I had come across several studies discussing athletes who, after mentally envisioning themselves successfully performing challenging sports plays, demonstrated improved real-life performance of those actions (Gould et al., 2014; Hickey et al., 2017; Ruiz et al., 2019). It intrigued me that, in certain instances, these athletes were challenged to visualize sports maneuvers that were unfamiliar to them or in which they had little to no prior experience. I wondered if these types of exercises could help my students who found themselves

in similar situations with respect to French class. Therefore, I set about developing imaginary scenarios of daily life in a francophone country, drawing from my own experience living overseas.

These activities had a more exogenic character and proved to be particularly beneficial for students who faced anxiety when confronted with tasks they perceived as requiring background knowledge and prior experience they lacked to accomplish successfully. With the task-guided imagery, students received scripted scenarios to follow, eliminating the need for them to rely on any prior knowledge or experience. Through these activities, students envisioned the prescribed situations and their outcomes, effectively creating an L2 experience upon which they could build their L2 possible self. I began implementing the task-guided imagery assignments during the second quarter of the pilot study, increasing the quantity assigned over time due to the enthusiastic feedback I received from students. This input reinforced my commitment to prioritizing these exercises in my course curriculum and laid the foundation for my doctoral research plan.

3.4 Pilot Study Data Analysis

3.4.1 Pilot Study: class group organization for data analysis

As mentioned earlier, the number of task-guided imagery exercises assigned per class varied throughout the pilot study. Given that one of the principal objectives in this paper is to examine the impact of task-guided imagery exercises on L2 possible self development, I opted to categorize the pilot study classes into distinct groups based on the number of task-guided imagery assignments completed, facilitating meaningful comparisons.

Group 1 encompasses classes 101F and 103C, which exclusively engaged in elicitation exercises without any task-guided imagery. In contrast, Group 2 comprises classes 101D, 102A, and 102B, who were assigned one elicitation exercise and completed two task-guided imagery assignments each. Groups 3 and 4 pertain to a single class, 102E, which was divided into two

subgroups, with neither subgroup participating in elicitation exercises. The first subgroup, 102E[1], consisted of new students who had not previously taken French during the preceding quarter in the 101D class, and therefore had no prior exposure to the task-guided imagery assignments. These incoming students successfully completed four task-guided imagery assignments. On the other hand, students in subgroup 102E[2] were returning students from the 101D class who had already completed the two task-guided imagery assignments for that class. In addition to these prior assignments, they successfully completed four additional task-guided imagery assignments in the 102E class, accumulating a total of six completed task-guided imagery assignments (please refer to table 3).

Table 3 Pilot Study Class Group Data

Pilot Study	Course	Number of Elicitation Exercises	Number of Task-Guided Imagery Exercises
Group 1 - no task guided imagery	101F 103C	2	0
Group 2 - two task-guided imagery	101D 102A 102B	1	2
Group 3 - four task-guided imagery	102E[1]	0	4
Group 4 - six task-guided imagery	102E[2]	0	6

3.4.2 Pilot Study Quantitative Data Analysis

The data handling process mirrored that of the main research study (please refer to sections 4.3.4.2 and 4.3.4.4). It involved computer coding the data into Microsoft Excel and structuring it into multi-item scales for each variable. To assess the connection between L2 possible selves and

motivational intensity I computed reliability coefficients (.91 for Possible Selves, and .77 for Motivational Intensity), as well as correlations and their respective significance levels. Missing data was replaced with the item means from each respective scale to maintain consistency of the overall results. Subsequently, I conducted descriptive statistical analyses, paired *t*-tests, calculated Cohen's *d* effect sizes for paired samples, and determined Grissom's Probability of Superiority for both class group.

3.4.3 Pilot Study Qualitative Data Analysis

3.4.3.1 Approach

Qualitative data consisted of semi-structured interviews, which were conducted in person or via video conference, and enabled a thorough exploration of students' responses to the survey items. I had initially planned to follow students over the course of one quarter; however, unique circumstances provided an opportunity to prolong my observation period with several students beyond the initially intended 10-week period. When I became the sole French instructor on campus, I found myself able to continue the research with students who had enrolled in the subsequent quarter of language class, progressing to the next level. Their continuation of French allowed them to further their participation of the L2 possible self activities. This afforded me the opportunity to monitor their progress over two quarters, conducting a total of two sets of interviews instead of one. The extended period was of particular interest not only for the prolonged observation time, but also for the chance to witness any changes in student motivation due to the shift from in-person to online teaching environments prompted by the Covid-19 campus shutdown and confinement measures.

Although interview participation was voluntary, a large majority of students chose to contribute. Given the mass of qualitative data obtained, it became apparent that there would not be

sufficient room to explore all of the student data at the same depth if I wished to examine in detail the narratives for the 'longitudinal' students. A choice had to be made between depth and breadth. Given the fortuity of having longitudinal data available, I opted for a more detailed descriptive case study approach of four students (for more information on the benefits of the case study research approach and the detailed research steps taken in this study, please see Appendix A).

These four cases, though diverse, serve as exemplars representing various student situations observed during my tenure at the community college. (The selection process for these four case studies is addressed in section 3.5.3.) Three of the cases align with the overarching hypotheses of the current research, while one case diverges. The selection of the last case as a 'direct rival' to my suppositions implies that factors beyond the pedagogical intervention may have contributed to the observed outcome for this student.

In qualitative research, it is critical to identify and examine plausible rival cases that challenge the initial propositions. This practice, as outlined by Yin (2018), underscores the researcher's commitment to rigor by actively acknowledging evidence related to other influences and outcomes. By incorporating rival cases into their studies, researchers demonstrate a dedication to uncovering root causes and avoid the perception of "stacking the deck" in favor of their general hypotheses (Rosenbaum, 2002).

As a researcher steeped in positivist tradition, I have diligently worked to minimize subjectivity by adhering to the methodologies outlined by Yin (2020), with the primary goal of fortifying the reliability and validity of both the qualitative data and my interpretations. To establish construct validity, I have employed triangulation, relying on a variety of sources (including survey data, interviews, and researcher-observed notes). Internal validity has been maintained through the implementation of well-established analytical techniques, specifically

pattern-matching via coding and thematic analysis. External validity is recognized through the creation of analytical generalizations that allow for the transferability of the findings in contextually similar conditions, fostering greater conceptual understanding through inductive and defensible reasoning. Finally, reliability was ensured through the detailed documentation of interview protocols and the steps taken during the research process, both for data collection and analysis (for details, refer to Appendix A). I have endeavored to render the findings sufficiently authentic to the way the participants presented the construction of their social worlds and identity narratives, providing trustworthy accounts of their language learning experiences.

3.4.3.2 Data Analysis: process

The task of searching for patterns and themes in each student's transcript was a demanding one; each interview revealed a wealth of information about student's perspectives and experiences, and there were two interviews for each student. While not directly assessed in the pilot study survey, instances arose during the qualitative interviews where students expressed their perceived competency beliefs. As these ideas are relevant to the students' ability to develop their L2 self-schemas, I have chosen to add this information to the case study analysis.

Given the amount of data and its complexity, I separated the interviews into smaller, more manageable sections. One way in which this was accomplished was to organize the students' responses into four main categories pertaining to the aim of this research following techniques outlined in Bernard, Wutich, & Ryan (2017). These categories were: student background and initial conditions, L2 possible selves, motivational intensity, and perceived competency beliefs. Any feedback received on the intervention activities was also noted.

Student transcripts were read and color coded for each of these categories, with a different color corresponding to each one (L2 possible selves were differentiated by using different colors

to denote L2 possible selves, L2 expected selves, and/or L2 feared selves). Summary tables of quotes from the four categories were constructed and the transcripts were re-read. Evocative words or phrases that connotated strong feelings or experiences were bolded, and a "notes and observations" column was added to capture student gestures and reactions, or other pertinent information. The students' statements were condensed into brief verbatim quotes of the material that best encapsulated their experiences, and then the quotes were tabulated across the two interviews.

The transcript sections were analyzed for meaning using an explanation building technique summarized by Yin (2018), or what Beach and Pedersen have called *process-tracing* (2019). This technique involves searching for causal mechanisms belonging to the theoretical framework one is working under and testing whether all parts of the mechanism are present within a particular case. The researcher then aims to construct an explanation according to theory based on the presence of these mechanisms, and any supporting empirical evidence.

In my investigation, I sought out mechanisms associated with L2 Possible Selves, including the: (i) existence of vivid and clear mental representations of this self-schema (Wilson, 2000), (ii) participation in L2 private-speech (Zhou & Papi, 2023), (iii) visualization of lucid daydreaming scenarios in L2 contexts (Dornyei, 2009), (iv) presence of an L2 *language ego* (Guiora & Acton, 1979), and (v) stated strategies or goals towards achieving L2 self (Hoyle & Sherrill, 2006). To gauge motivational intensity, I looked for: (i) evidence of integrative motivation (Ryan, 2009), (ii) reactions and approaches to overcoming challenges and setbacks (i.e. resilience and persistence) (Campbell & Storch, 2011), and (iii) desire for more L2 exposure outside of class (Csizér & Kormos, 2014; Lyons, 2014) (e.g. seeking out more learning opportunities). The criteria for analyzing perceived competence were: (i) self-efficacy beliefs and accompanying self-

appraisal processes (Bandura, 1998), (ii) perceived personal control (Bandura, 1998), and (iii) social acceptance/reinforcement of ability (Williams and Lillibridge, 1992).

The analytical approach involved organizing significant quotations from student transcripts into the previously established four thematic groups by mechanism across two distinct time periods, using a tabular format, as outlined earlier. This method also served as a form of thematic triangulation, enabling the identification of predominant themes either across or within interviews. Each case study aims to synthesize the emerging themes or patterns within the case history, creating a cohesive narrative of each student's experiences. These themes were compared over time to cultivate a contextually sensitive understanding of any transitional phases they underwent during the pedagogical intervention.

3.5 Pilot Study Findings

In the following section, I present the findings of the pilot study, which served as a crucial preliminary step in my research journey. It is important to note that this pilot study, while informative and valuable, did not encompass the same level of rigor and comprehensiveness as the main study previously discussed in this paper. Instead, it functioned as a work in progress, allowing me to test the feasibility of my research methods and the viability of my research questions. The limited scope and resources dedicated to this pilot study underscore that it primarily served as a foundation upon which to build a more robust research endeavor. I put forth below the initial insights and trends that emerged, while recognizing that the results should be interpreted with an understanding of the inherent limitations in its design and scope.

3.5.1 Quantitative Data Findings

3.5.1.1 Correlation Coefficients by class group

Assessing the degree of the relationship between L2 possible selves and motivational

intensity, I observed that only Group 2 demonstrated the anticipated pattern, displaying a growing positive correlation pre- and post-intervention (from .32 to .43). It should be noted that this link is moderate, and overall, there is no discernible significant trend emerging between the two variables. highlighting a feeble connection between motivational intensity and possible selves.

Table 4 Pilot Study Correlation Coefficients

Possible Selves/Motivation Correlation Coefficients	**Pre-Intervention**	**Post-Intervention**
Group 1 - *no imagery activities*	-0.06	0.22
Group 2 - *two imagery activities*	0.32	0.43*
Group 3 - *four imagery activities*	-0.05	0.19
Group 4 - *six imagery activities*	-0.08	-0.19

*p <.05

3.5.1.2 Findings by Research Hypothesis

To address the hypotheses guiding this study, I conducted descriptive statistical analyses to establish the mean and standard deviation values. Furthermore, paired sample t-tests were performed to ascertain statistical significance, gauge effect sizes, and estimate the likelihood of superiority. Let us now examine the observed changes that transpired before and after the possible self exercises for these four groups, organized according to the research questions.

Research hypothesis 1 (RH1): Research has shown that possible self interventionists exercises have demonstrated efficacy in cultivating possible selves, particularly in the domains of art, sports, and medicine. I hypothesize that the implementation of such exercises within the context of foreign language learning will lead students to express greater levels of development in their second language (L2) possible selves after completing the interventionist activities, surpassing their pre-treatment assessments.

Each class group reported heightened possible self development. Group 1 observed an increase, shifting from an initial mean of 5.0 with a standard deviation of 0.09 to a final mean of 5.4 with a standard deviation of 0.09, ($t(36) = 2.953$, $p < .001$). Group 2 experienced a substantial rise from an initial mean of 4.3 with a standard deviation of 0.9 to a final mean of 5.5 with a standard deviation of 1.1, ($t(32) = -8.566$, $p < .001$). Group 3 displayed an increase, shifting from an initial mean of 5.4 with a standard deviation of 0.5 to a final mean of 5.9 with a standard deviation of 0.05, ($t(5) = -2.528$, $p < .001$). Group 4 witnessed an increase, transitioning from an initial mean of 5.6 with a standard deviation of 0.4 to a final mean of 6.2 with a standard deviation of 0.03, ($t(8) = -5.622$, $p < .001$).

Table 5 Pilot Study Possible Self Statistical Data

	Pilot Study					
Possible Self Measure	Participants	*M*	*SD*	*t*- value	Effect size[1]	PS[2]
Group 1	*n* = 37					
Preintervention		5.0	0.9			
Postintervention		5.4	0.9	2.953***	0.49	64%
Group 2	*n* = 33					
Preintervention		4.3	0.9			
Postintervention		5.5	1.1	-8.566***	1.49	86%
Group 3	*n* = 6					
Preintervention		5.4	0.5			
Postintervention		5.9	0.5	-2.528***	1.70	89%
Group 4	*n* = 9					
Preintervention		5.6	0.4	-5.622***	1.88	90%
Postintervention		6.2	0.3			

*$p < .05$; ** $p < .01$; *** $p < .001$

[1]Cohen's *d* for paired samples

[2] Probability of Superiority based on Effect Size (Grissom, 1994)

The enhancement in Possible Selves measures was evidently strong and significant across all groups following the possible self activities. It is worth noting that the improvement in Group 1, who did not perform task-guided imagery activities, had a smaller effect size compared to the other groups, indicating a relatively lower magnitude of impact than those groups that completed task-guided imagery assignments. These results confirm the first research hypothesis.

Research hypothesis 2 (RH2): Possible selves are theorized to translate aspirations into behavioral strategies and intentions within their respective domain. I hypothesize that students who articulate well-developed second language (L2) possible selves will also convey heightened levels of motivational intensity, characterized by the desire and effort to persist in their foreign language learning journey.

Motivational intensity showed a slight increase across all class groups, albeit these changes were modest and failed to attain statistical significance. The effect size consistently hovered around a moderate level, suggesting an average impact magnitude ranging between 50% and 58%. Consequently, Research Hypothesis 2 is rejected; while there were notable enhancements in L2

Table 6 Pilot Study Motivational Intensity Statistical Data

	Pilot Study					
Motivational Intensity	Participants	*M*	*SD*	*t*- value	Effect size[1]	PS[2]
Group 1	*n* = 37					
Preintervention		5.5	1.1			
Postintervention		5.6	1.0	-0.379	0.06	50%
Group 2	*n* = 33					
Preintervention		5.1	1.2			
Postintervention		5.2	1.1	-1.707	0.30	58%
Group 3	*n* = 6					
Preintervention		5.1	0.9			
Postintervention		5.3	1.0	-0.277	0.11	53%
Group 4	*n* = 9					
Preintervention		5.3	1.1	-0.920	0.31	58%
Postintervention		5.5	1.2			

*p <.05; ** p <.01; *** p <.001

[1]Cohen's d for paired samples

[2] Probability of Superiority based on Effect Size (Grissom, 1994)

possible self measures, motivational intensity did not demonstrate a significant corresponding increase.

3.5.2 Qualitative Data Findings

Given the abundance of qualitative data, I restricted the case study analysis to four students who had undergone the treatment condition for two quarters. These "longitudinal" students were chosen according to their initial survey scores compared to the class average pre-treatment. Specifically, I examined the pre-treatment class score averages for possible selves and motivational intensity. Then, I selected students who had scores higher, average, or lower than their respective group averages. The breakdown of this selection is as follows: for L2 possible selves, Nadia (high score), Gabriel (average score), and Henry (low score); for motivational intensity, Ming (high score) and Gabriel (low score). There was no candidate available who had average scores in motivational intensity among these students. Three of the cases align with the overarching hypotheses of the current research, while one case diverges. The tables below show the students' survey scores compared to their respective groups, pre- and post-intervention.

Table 7 Student Case Study and Group Survey Results Comparison

Group 1					
Pre Intervention	**N**	**Minimum**	**Maximum**	**Mean**	**Henry**
L2 Possible Self	37	2.5	6.9	5.0	4.5
Motivational Intensity	37	3.2	7.0	5.4	5.8
Post Intervention					
L2 Possible Self	37	3.3	6.9	5.4	5.1
Motivational Intensity	37	4.0	7.0	5.6	4.4
Group 3					
Pre Intervention	**N**	**Minimum**	**Maximum**	**Mean**	**Henry**
L2 Possible Self	6	4.7	5.9	5.4	4.7
Motivational Intensity	6	3.8	6.0	5.1	5.0
Post Intervention					
L2 Possible Self	6	5.0	6.5	5.9	5.0
Motivational Intensity	6	3.4	6.2	5.3	4.8

Table 7 Student Case Study and Group Survey Results Comparison (continued)

Group 2							
Pre Intervention	**N**	**Minimum**	**Maximum**	**Mean**	**Ming**	**Gabriel**	**Nadia**
L2 Possible Self	33	2.6	6.0	4.3	5.1	4.3	5.9
Motivational Intensity	33	2.4	7.0	5.1	6.6	3.8	6.2
Post Intervention							
L2 Possible Self	33	2.6	6.8	5.5	5.7	5.0	6.6
Motivational Intensity	33	3.2	7.0	5.2	6.7	3.8	6.4
Group 4							
Pre Intervention	**N**	**Minimum**	**Maximum**	**Mean**	**Ming**	**Gabriel**	**Nadia**
L2 Possible Self	9	5.1	6.0	5.6	5.8	5.1	5.8
Motivational Intensity	9	3.0	6.4	5.3	6.7	5.0	6.2
Post Intervention							
L2 Possible Self	9	5.7	6.7	6.2	6.4	6.0	6.2
Motivational Intensity	9	3.0	7.0	5.5	7.0	5.2	6.2

3.5.2.1 Case Study: Ming

Background

Ming was born in Taiwan and came to the United States when he was very young. His mother is Taiwanese-American, and his father is Italian-American. Drawing from his experience as an immigrant child growing up in the United States, Ming clearly has developed an identity as a multilingual individual. Surrounded by a diverse linguistic environment in his childhood, he effortlessly embraces this background and qualifies this part of his identity as unique compared to his US-born classmates.

In preschool, Chinese and English were spoken as well as some Spanish, but he soon forgot all his Spanish once he transitioned into the public school system. He only spoke Chinese at home because his school peers "would bully you if you spoke another language." After elementary school he was enrolled in a private school. Even though he had not been exposed to Spanish since

preschool, he was put into a high intermediate Spanish class there and remembers feeling "so lost" and every day wondered "what is happening!?" He told me Spanish class was a difficult experience, but he stuck with it for years, transitioning to Japanese when he got to high school. Japanese class "was really fun" and he loved studying it. After four years of Japanese, he graduated high school and enrolled in community college and decided to take French class. "I wanted to switch languages. I've been doing a lot of Asian languages and culture basically my entire life. And I was like, I want something new." Looking back on his language learning trajectory, he feels that he is good in languages because they "come naturally" to him. His linguistic prowess has been reinforced by praise given to him by family and friends over the years.

During the first observational quarter, Ming belonged to Group 2, completing one elicitation exercise and two task-guided imagery activities. In the subsequent quarter, he transitioned to Group 4, participating in an additional four task-guided imagery activities, bringing his total to six.

3.5.2.1.1 Interview 1

L2 Possible Selves

Ming has extensive language learning experience. Prior to studying French, he attended several years of Spanish and Japanese classes, all while conversing in Chinese and English at home. He furthers his language study with vivid daydreams where he envisions himself in foreign contexts fueled by exposure to L2 online content. I asked him if also envisioned speaking in foreign languages during his daydreams; he responded:

> Oh yeah, all the time! I'd have dreams about me working at, I think the US Embassy and I was hosting a Japanese Minister and I had to translate for the US ambassador. And that was so much fun. That was like the best daydream I've ever had! Sometimes it would just be like guiding my parents through Paris and having to use French.…that was a lot of fun.

He often projects himself mentally into the online media he watches. In his mind's eye, he has argued as an international lawyer at the International Criminal Court (ICC) and walked around France with YouTube travel influencers.

> I can see myself walking down the street. I can live the experience, right? And then also with their commentary, like how things are and how they compare and contrast with their own culture, with their own upbringing…I tell myself this is what I want to do. Long term is to be able to speak this language and I just have to think of the job that I want to do. Like right now my big motivation is to move to the Netherlands, The Hague, that kind of thing and get an internship at the ICC. That's what I really, really want to do.

The mental representations in his daydreams and the stimulus information he watches online have helped Ming construct a solid L2 possible self. Projecting himself into the future, he imagines himself performing and speaking in Japanese and French, activating these L2 selves in his working self-concept. He reports doing so easily and often, and feels positive emotion afterward from the imagined outcome of his performances. He strengthens these L2 possible selves further by associating them to actional plans towards his future employment goals. Possible selves coupled with planned action have a greater self-regulatory effect, providing Ming with a concrete strategy towards closing the gap between his current and future L2 selves (Oyserman, Bybee, Terry, & Hart-Johnson, 2004).

In addition to these imagined scenarios, Ming has experienced real-life situations where he has successfully used the foreign languages he has studied, like this instance speaking Spanish while on a trip with his friend's family.

> I was with my friends and we were at Wild Waves; and her car broke down. It wouldn't start up. And so, we had to jump start the engine. So, I had to [speak Spanish]. There was a Mexican family about a couple of cars away. And the mom asked me, 'hey Ming can you

> go talk to them and ask for jump cables?' and I said 'Hola', that kind of thing, something super basic. It made me feel good and at the same time I was like, well, I wish I could [speak] more, so kind of frustrated that I can't.

Ming expressed satisfaction in being able to assist his friends by utilizing the Spanish skills he acquired in school. His diverse linguistic background, combined with real-life experiences, mutually reinforce each other, confirming the tangible benefits of language acquisition. Ming's frustration with his Spanish fluency level serves as an indicator of his self-assessment process, where he evaluates his performance against his desired proficiency. This self-appraisal enables him to refine his learning strategies and efforts in Spanish to better align with his goals, which in turn, help him to maintain the positive emotions associated with his progress (Boyatzis & Alrivou, 2006).

Engaging Ming in discussion unveiled the significant influence of his past encounters and future aspirations in crafting a vibrant, well-defined, and robust representation of his L2 Possible Self. Ming has combined actionable plans with these self-schemas and holds a firm belief that he can successfully achieve them. This conviction is substantiated by his initial survey scores where he consistently surpassed the group average, providing tangible evidence of his positive outlook on attaining his L2 Possible Self. Given that Ming came into the study with an elevated L2 self score and had already recruited his imagination to develop L2 self-schemata, I was curious to ascertain in the second interview if the task-guided imagery activities would promote the development of a French L2 self, amongst his other established L2 selves.

Motivational Intensity

Throughout the interview, Ming extensively discussed his innate drive for language learning. He emphasized the need to be able to communicate effectively with non-English speakers, highlighting the positive emotions accompanying these interactions:

> For me, being able to communicate with people who can't really communicate in English, I find that extremely fun to try to practice their language and trying to branch out a little bit, out of my comfort zone. When you're communicating with people in a language that you studied, it feels….it feels scary at first because you're like 'oh my God, I'm probably going to sound like a 2-year-old speaking', but…I mean, that's how you learn. I think that's how I learned Japanese and how I practiced it. I mean, my reading sucks, but I'm able to communicate! It's successful! You can see that there's actually an exchange going on. It makes me feel like 'wow!' I feel good about myself!

His fervent motivation became evident during high school when he proactively chose to study Japanese ahead of the standard course curriculum. Instead of becoming disheartened by the slower pace of the course, Ming seized the initiative to self-educate, satisfying his appetite for learning and ensuring a continual sense of progress:

> So [the classroom experience] was good for the first…for my freshman year. It was ok sophomore year, that's when I started trying to teach myself more Japanese, trying to learn kanji and trying not to read things in Chinese when I didn't know how to read it in Japanese. I started practicing and experimenting with kanji and I'd write that in the essays I had to write, and homework assignments…I never feel like quitting, it's like I need to figure this out. That kind of thing. If it's a certain word, then I can't get [it] out of my head. I need to know. Like, right now! [When I figure it out] I feel so relieved!

Ming perceives the disparity between his actual L2 self and his L2 desired future self which creates the anxiety he feels before he "figures it out" and perceives he is making progress. To rectify this negative emotional state, he is driven to bridge the gap between these selves, by engaging in self-regulatory processes, such as goal-setting, self-reflection, and behavior adjustment, to achieve his envisioned L2 future self (Higgins, 1987; Key et al., 2000).

Self-monitoring allows learners to track their progress in this endeavor and identify any gaps that need bridging, generating positive emotion. These feelings of well-being become a driving force, fueling determination for further self-direction, motivated by the desire to sustain the positive affective tone. Ming's eagerness to expedite his learning suggests a perceived delay in reaching his Japanese language goals. To cultivate a positive self-evaluation, he embraced additional learning, ensuring a continuous sense of accomplishment.

In a similar vein, Ming decided to download a web-based language learning application before enrolling in French class, so he could "get a head start" in French. This proactive approach showcases his commitment towards his goals and his desire to stave off feelings of disappointment or dissatisfaction with any perceived learning delays.

To gauge his motivational resilience, I inquired about potential scenarios that could make him discontinue learning French. He struggled to answer the question, so I suggested instances such as a negative classroom experience, an unfavorable encounter with a teacher, or an interaction with a rude French person, to which he responded:

> If I consistently had God awful…terrible French teachers, then probably I would take a step back and be like maybe I need to pursue something different,' or it's either the professor or it's me, how I'm perceiving things,' that kind of thing. By taking [the course] later, probably with a different professor or like possibly just going to that professor and being like, 'hey, I'm not getting it. I don't know your teaching style. Can we work something out?' And if we can't work something out, then I'm just like 'OK, I'm going to take a step back and probably do this next quarter.'

Ming confidently asserted that encountering a "bad" teacher or facing a less-than-ideal classroom experience would not derail his commitment to long-term language learning goals. While acknowledging that an unsupportive instructor might prompt him to postpone enrollment,

he underscored his dedication to learning through his determination to find alternative courses rather than abandoning the learning process entirely.

Overall, Ming's motivational intensity was illustrated by his keen (and impatient) focus towards achieving communicative proficiency and his steadfast mindset in the face of potential obstacles. The first quarter interview did not shed light on whether this motivation stemmed primarily from instrumental or integrative factors, as he mentioned items that could point in either direction, such as his desire to really connect with foreigners and his professional need for French. Saying that, his heightened motivational intensity was well reflected in his survey scores at 6.7, consistently reporting levels 1.5 points higher than his class average.

3.5.2.1.2 Interview 2

L2 Possible Selves

During the second interview, Ming appeared more pensive and told me the task-guided imagery exercises had prompted him to reflect more on his L2 possible selves. He shared that his personal values had played a prominent role in their development and towards the formation of his French L2 self. Looking back, he said he had been "bullied like heck" throughout middle and high school, and had witnessed other "more vulnerable kids" being bullied as well. Fueled by frustration, he took a stand against what he perceived as religious teachings contributing to the bullying culture in his private school and found himself being told to keep his "mouth shut" and "dragged into conferences" between parents and school administrations. These experiences were the catalyst to his interest in human rights law and politics, which is the main reason why he is learning French:

> For me it would be to break down language barriers to have a deep one-on-one conversation with someone or like helping out with an international organization where, like their official

> language is like French. That's why I want to learn and so I can play a part in [helping others]… I was researching international organizations and I got really into it, and I started researching it more and more and more until I found out French and English are their official working languages so like I have to learn [French].

Ming has tied his French possible self to a set of values and principles, shaped by his attitudes, behaviors, and decision-making, and influenced by cultural, societal, familial, and personal factors (Rokeach, 1973). Ming's negative experiences in high school have brought attention to, and helped define, his value system, which in turn has contributed to shaping his L2 possible self. This phenomenon referred to as "contextual cuing of the possible self," heightens its self-regulatory effect (Oyserman, Bybee, & Terry, 2006). Speaking of his personal values, Ming expressed that he finds France's human rights principles more closely resonate with his own beliefs, compared to his perception of human rights values in the US. He told me that after engaging in the task-guided imagery exercises, he found himself having daydream visualizations of himself in a French context more frequently, and expressed feeling "angsty" when he does not engage in activities that work to close the discrepancy gap between his current and L2 future self. One of his favorite visualizations is to mentally simulate arguing in French at the ICC.

Additionally, Ming mentioned his use of L2 private speech at times, saying that in a private manner, he had started rehearsing French words or phrases to himself, particularly when he is in the car, to get a sense of how it sounds when he speaks French, and to work on his accent:

> Yeah, I do that a lot. I'll be walking and then a word will pop in my head and I'll just repeat that or if it's a phrase I would repeat that. It's just more like relaxed kind of casual walking. Kind of playing with it, playing with the words.

He has also started speaking French in his mind during his lucid daydreaming.

> In one [visualization] I think I was with either a relative or some random person. I was in a cafe, that kind of thing, and then we were just being super passive aggressive with each other. So, arguing with an acquaintance or a partner or somebody. Maybe in a cafe. And saying "Ça vous plait?" [*Do you like that?]* being sarcastic….One of the funniest, I think, was I was out standing in line and then this lady was trying to cut [in front of] me and I said "Voulez-vous me passer devant [*Would you like to pass in front of me*]?"

The rehearsal of these French simulations contributes conceptual information into Ming's social-cognitive repertoire and his working self-concept. He is essentially embodying his potential future self as a French-speaking ICC lawyer by imagining himself in context and privately practicing French linguistic nuances and sounds through vocalization. This "trying on" of his L2 French self offers insights into his feelings and behaviors in that role and allows him to assess his competency to fulfill that persona (Taylor, Pham, Rivkin, & Armor, 1998).

Motivational Intensity

Ming has continued to reinforce future projections of his L2 self by watching the International Criminal Court (ICC) TV proceedings in French on YouTube and other politically minded shows. He has also started taking practice bar exams in French to "relax" and "pick up more French legal vocabulary."

> Sometimes what I do is I listen to interviews with, let's say, Francois Hollande *[former president of France]* …and I am interested in France's stance on the world stage when it comes to international justice, that kind of thing…they're really for it, like human rights. Human rights and basically everything that pertains to justice. They don't want to repeat stuff leading up to World War 2 or things that happen within World War 2, you know? I really find that admirable because the US doesn't really have the best legacy that way.

When I asked him how he would feel if his future aspirations did not come to fruition, he responded anxiously, reiterating his dissonance with "being an American" and expressing a desire to live and work overseas:

> I would be pretty devastated if I wasn't able to go to the ICC or work there, or if it was abolished, I would be pretty upset. Because yeah, their alternative would be the International Court of Justice. But that really doesn't do much…Their rulings are not binding. So, they are just there for show, to be honest. It would affect me and my backup plan would be either working for like, maybe a nonprofit organization or hopefully maybe work my way towards becoming maybe a judge or a prosecutor…If I couldn't speak French, it would be dramatic. It would be quite devastating because I wouldn't be able to work at the court or I wouldn't be able to work in certain non-governmental organizations because a lot of NGOs' official language is French…It makes me want to work to get this done now as fast as I can, that kind of thing. Like I'm in get-stuff-done mode when that [fear] kicks in, because sometimes I feel like I'm on a time limit with this thing…You know, not really resonating being an American.

Oyserman and Markus (1990) discovered that students demonstrated greater perseverance in striving towards a positive future self when they had also constructed an opposing feared self within the same context. Above, Ming portrays his feared self as someone incapable of speaking French and not working within the human rights field. This feared self holds such prominence in his mind that he feels compelled to hasten the realization of his L2 French self before it slips beyond his control. Feared selves, such as "academic failure" or "being unprepared for exams," represent outcomes individuals seek to avoid due to the negative consequences and associated emotions they evoke. Balancing feared selves with positive future selves in the same domain provides a richer source of motivational resources by encouraging consideration of the full

spectrum of outcomes tied to a particular course of action. My conversation with Ming unveiled that he had not only developed a vivid sense of his L2 French identity but also juxtaposed it with a feared self, intensifying his motivation even further.

The second interview cycle occurred after the Covid-19-induced shutdowns of university campuses. In response to this unforeseen circumstance, I modified my interview questions to address its impact, specifically inquiring whether students had managed to sustain their motivation levels post-lockdown. Ming provided the following response:

> It's made it a lot difficult. I'm more of an old school kind of thing where I have to be in class. I have to be present with other people learning for me to learn. That's how I've always been like if I'm in a room of people studying or talking…it's much more conducive learning environment for myself. I always like saying hello to people, talking about the day. Like small talk, that kind of thing. Yeah. And I missed my French study buddy Carla.

When questioned about how he sustained his motivation despite the absence of social interaction, he responded:

> Mostly I just tell myself, do you really want to be doing this? And I say yes, I do. And then I pull up one of my news apps, and I start reading it. [I think to myself] Ming, can you even read this? Are you even understanding? If not, you need to learn - that kind of thing. [To see] if I'm able to hear and comprehend. And if I'm not able to, then I'm just like, OK, you're sucking, step it up. I do better if [feedback is] a little more critical…If I personally know I'm sucking and they're telling me 'Good job Ming'. I'm just like, 'OK, you can be quiet.'

The social dimension is a significant aspect of possible self development. Individuals often gauge their abilities, achievements, and progress towards their envisioned selves by comparing themselves with peers. Such social comparisons can influence how individuals perceive their possible future selves, as they may seek to emulate or distinguish themselves from others in their

social circles (Oyserman & Destin, 2010). Moreover, feedback from significant others can profoundly impact one's perceptions of possible selves. Positive feedback can bolster beliefs in capabilities and aspirations, while negative feedback or criticism may instigate doubts or prompt adjustments in future self-perceptions (Bandura, 1998).

Due to campus shutdowns, Ming's vision of his L2 potential self was deprived of this crucial social dimension, which rendered its self-regulatory function more challenging. When he sensed demotivation and perceived himself falling short of his learning objectives, he engaged in internal dialogue that conjured his feared self as a possible consequence. Contrasting this feared self with his current reality brought certain negative outcomes to the forefront, enabling him to take action to avoid them (Dornyei, 2009). This method of contrasting possible selves can aid in strategizing towards goal attainment (Oettingen, 1996).

Despite the absence of classroom social dynamics, he maintained his motivation through self-talk and by invoking the feared self and its associated consequences. Campbell and Storch (2011) discovered that negative experiences could be mitigated when the image of the L2 possible self remained "unchanged and steady" in the face of difficulty. In these instances, demotivating factors can be downplayed as transient and peripheral, thereby protecting student competency beliefs. Despite the increased isolation, Ming reported a surge in motivation during the second quarter, escalating from 6.7 to the pinnacle score of 7. His capacity to sustain, and even amplify, this motivational drive to learn French in the face of increased social isolation and campus closures may be seen as a reflection of his resilient L2 possible self.

In our conversations, Ming's integrative motivation for learning French became evident. He expressed a profound emotional attachment to learning French, viewing it as a means to defend human rights, and stated he would be deeply affected if he were unable to continue his French

studies. His lack of resonance with American cultural norms appeared to drive him further down this path, fostering an aspirational vision of himself as a future international human rights lawyer, deeply rooted in an idealized French identity.

Perceived Competence

Bandura emphasizes the significance of *self-efficacy* beliefs (confidence in one's ability to accomplish specific goals or tasks) and a sense of *personal control* (belief in one's capacity to influence outcomes through actions) as vital elements for fostering perceived competence. Another facet of perceived competence involves the evaluations of others regarding our abilities, referred to as *social acceptance* by Williams and Lillibridge (1992).

According to Bandura, individuals must not only believe they can make decisions to achieve desired outcomes but also possess the skills and means to effectively carry out those decisions (1998). Positive evaluations from significant others serve to reinforce these beliefs about our capabilities. When individuals believe they can accomplish something, they are more inclined to mobilize their cognitive resources and behavioral strategies to attain the goal. As Bandura (1988) aptly puts it, "People's level of motivation, affective states, and actions are based more on what people believe than on what is objectively true" (p. 2).

While the pilot survey did not assess perceived competence, Ming exhibited the components of self-efficacy, personal control, and social acceptance that constitute its operation. He displayed strong self-efficacy beliefs regarding his capacity to learn and communicate in foreign languages. He did not perceive himself as helpless or reliant on external factors to achieve his learning objectives. Instead, he actively took control of the learning process, as evidenced by his proactive approach of studying independently ahead of the class.

Moreover, Ming exhibited confidence in his ability to overcome potential obstacles in his

language learning journey, indicating a robust sense of personal control. Ming acknowledged his capability to make decisions that can influence events and the learning environment to ensure a more favorable outcome, such as seeking out courses with more supportive instructors or effective methodologies. Bandura writes, "Effective adaptation to existing realities requires the exercise of control over the demands of those realities" (1988, p. 30). In essence, adaptation is the opposite of the abdication of control.

Ming has also received social reinforcement of his ability, often being relied upon by friends and peers in foreign language situations.

> A lot of people in my Japanese class depended on me to, basically, shove them answers for homework... they were like, 'I want you to stop writing in kanji, I want you to write in our basic alphabet, hiragana,' because it was easier for them to read instead of kanji. And I'm like, 'but I want to learn kanji.' And I knew they cheated [using] me on quizzes and written exams, and I was like, 'whatever.' [rolls his eyes] …That was a little compromise I made with myself: writing kanji for my homework and then rewriting it in hiragana so I could help my friends.

He not only assisted friends by speaking Spanish when their car broke down, but also went the extra mile by completing his Japanese homework in both kanji and hiragana scripts to help classmates with homework answers. Ming's proficiency in Japanese was acknowledged by his peers, who frequently reached out to him for accurate homework answers. Additionally, Ming's parents have expressed their belief in his language abilities. He told me that if he were to stop learning French, his parents would be confused and probably say something like, "What the hell, Ming? You show us you love French. What happened? Like what devastating thing happened?" Ming has internalized his family's confidence in his language abilities, identifying himself as a skilled linguist.

> Languages come to me naturally, that's what my parents think too. That's what my parents think about me personally. But you recognize that you like to go faster. To learn more than what's expected… [In my family], we just do it. It just happens to us naturally, because we grew up with it. And I'm just looking at it from an outside perspective. [Before taking French class] I just was talking to myself and saying, 'yeah, it'll be just like any other language.'

Ming's commitment to his language studies has been reinforced by the validation and support he receives from family and friends who consistently recognize his linguistic prowess. Setting ambitious goals in this field allows Ming to showcase his linguistic aptitude to family and friends while exemplifying strong self-efficacy beliefs. His willingness to persist in the face of potential challenges and negative experiences reflects a positive self-judgment of his ability to control and adapt to a variety of circumstances, exercising agency towards achieving his desired outcomes.

3.5.2.2 Case Study: Gabriel

Background

Gabriel was born in the US from Pilipino parents and grew up speaking Tagalog and some English at home. Due to outside influence from school and friends, he stopped speaking Tagalog and switched over entirely to English once he was in grade school. Today he says he answers his relatives in English when they speak to him in their native language. He studied Japanese for four years in high school and remembers feeling overwhelmed by its complexity and the three different writing styles that he was tasked to learn. As there was only one Japanese teacher and class for his level, he was with the same students year after year. He continued Japanese in spite of its difficulty because he felt that he had gotten to know the teacher and the other students and he wanted to stay among this cohort. After visiting Paris with his family, he decided to enroll in

French to satisfy university degree language requirements. During our conversations, he conveyed his view of language acquisition as a means to facilitate international travel and as a necessary pursuit in obtaining his diploma.

Gabriel was in the same cohort as Ming, belonging to Group 2 in the first quarter which completed one elicitation exercise and two task-guided imagery activities. In the subsequent quarter, he moved on to Group 4, participating in an additional four task-guided imagery activities, bringing his total to six.

3.5.2.2.1 Interview 1

L2 Possible Selves

Despite his Filipino heritage, Gabriel did not appear to strongly identify with the language or culture. Although he understands and speaks Tagalog fluently, he consistently responds in English when addressed in Tagalog by his parents or extended family. Initially, his parents reacted negatively to his preference for English, but now they "no longer seem to care."

While studying Japanese, he acknowledged experiencing brief thoughts of imagining he was in Japan, clarifying that it was not like a cinematic experience in his mind, but rather a fleeting notion - "more of a passing thought, just like a quick little 'oh, that would be interesting' kind of thing." When I pressed him to describe these images in more detail, he intimated that they were not very clear in his mind.

> I wouldn't picture myself speaking fluent Japanese. I'd be somewhere in Japan. Like, I don't know…just kind of drinking in the culture or whatever.

When I asked him if he had experienced visualizations of himself in a French context, he replied:

> I could imagine myself being in France, in a cafe, or talking to an older guy, you know, like who had done World War 2. And now, now that I'm learning French, I'm thinking, 'oh,

when's the next time I could go back to France and utilize what I've learned when I travel?'

Although he mentions fleeting mental snapshots of himself in a French café, he lacks vivid and distinct images of himself conversing in French or navigating a French environment. He pivots the discussion away from French self-imagery to a pragmatic angle, wondering when he will be able to use his newly acquired French. He seemed surprised and chuckled when I inquired more directly about whether he harbored different language personas, such as a Tagalog Gabriel, or Japanese Gabriel, or English Gabriel, suggesting he may feel differently when speaking one language compared to another. He replied: "Oh gosh, I don't! I wouldn't say so. No, no, I wouldn't say so…It's the same straight out." Digging deeper, I inquired about his possible use of private speech and repetition in Japanese or French; however, here again, his response was negative: "I don't believe so. I don't recall ever having a moment where I was speaking Japanese to myself."

Our conversation revealed that he had not formed any concrete beliefs, emotions, or behavioral inclinations toward the development of an L2 self. His inability to articulate a compelling self-schema within a French or Japanese context suggests that these potential selves are currently inaccessible cognitively and hold little activation potential (Norman & Aaron, 2002; Higgins, 1996). Relatedly, there is likely a lack of attention being paid towards stimulus information related to the L2 possible self and its development (Bargh & Pratto,1986; Roskos-Ewoldsen & Fazio, 1992). Gabriel also appeared to have relinquished his connection to Tagalog, with no expectations of maintaining a 'Tagalog self' from his family's perspective. Furthermore, he admitted he no longer thinks about himself in a Japanese context since he no longer studies that language.

At this stage of Gabriel's French learning journey, he lacks vivid and detailed mental images of a potential French L2 self, a finding that aligns with his L2 self survey scores. Starting

with a neutral score of 4.3, Gabriel's assessment of his French language future self only slightly increased to 5 by the end of the first quarter of class, which was lower .5 than the class average.

Motivational Intensity

Exploring his past and current motivation for studying languages, Gabriel described being motivated by practical considerations and viewed language classes as an addendum to main courses of study.

> To me foreign language was always an elective. It was never really required in any class. It was considered an elective, unlike you have to take math and you have to take science. So, I think I grew up in a society that really puts emphasis on math and science. I never thought of learning a language as super important in school.

Gabriel described math and science as core curriculum whereas foreign language study is optional. When questioned about his extensive study of Japanese, which surpassed the requirements for his high school diploma, he justified his choice by highlighting the elevated social status it gave him and the other Japanese language learners as an elite group having chosen "a hard language."

> Well… Japanese isn't that popular, because people are intimidated by it. I want[ed] to try. something hard so, I earned some respect. [When I told people I was taking Japanese], everyone was like, "oh whoa!" So being able to say I've done four years of Japanese - I mean that's pretty good! There's a respect that goes along with that, right? You feel people respect you, you know?

Aiming to understand his mindset regarding motivational resilience and persistence, I inquired how he would handle a situation involving negative feedback or poor exam performance. I wondered if he had engaged in rallying internal dialogue or some form of self-motivating pep talk.

> I don't think I ever had a conversation within myself. I just told the teacher [that] I don't

> know what to do. I don't understand what's happening. I can get this. I just need to understand a bit more.

When asked about additional motivators, particularly for learning French, Gabriel noncommittedly mentioned travel. Although he expressed a general fascination with "other countries, other cultures," he emphasized that his interest in languages stemmed from a desire to feel capable and confident while exploring foreign destinations.

> I guess travel is one of my hobbies. Yeah, I think so. I'm fascinated about the world and other countries, other cultures. So, I think that one [has] mainly fueled my fascination for language because I want to feel competent, like I can go and do that. Like a pass… I'm very independent. So I don't really like the feeling [that] I can't do anything. I need to know what I'm doing. I don't want to feel helpless and lost.

It became clear that his motivation for learning French stemmed from practical and utilitarian purposes, rather than an emotional identification towards the French language and French cultural values. He was unable to articulate a motivational focus for learning French beyond the external factors of obtaining degree requirements and travelling easier.

Gabriel did evoke a feared self in our discussions, describing someone who is inept and dependent on others. This feared self was activated during a recent trip to France where he felt "like a child…helpless and lost." This discomfort prompted him to enroll in French classes, aiming to alleviate his fears of being perceived as an incapable traveler. He went on to say that his final year of Japanese study was difficult and burdensome; however, he found renewed motivation by considering its potential impact on his academic standing and grade point average.

> I definitely think I had a dip in my motivation for [studying Japanese]. Maybe towards senior year of high school. I'd have Japanese homework and it was hard to understand. There were times when I thought of it as a burden…I felt like I *had* to do it because of my

> grade, so my grade wouldn't suffer. I would say grades are a big motivator, especially now because I have a goal that I'm trying to reach, because I am trying to transfer to the university. So, of course I need good grades to get in.

Despite displaying what seemed to be sufficient motivation to learn French, Gabriel's survey score in this aspect was moderately weak, remaining unchanged at 3.8 from the beginning to the end of the first quarter. This score was notably lower than the class average of 5.2.

Although the survey items assessing motivational intensity were not designed to distinguish between intrinsic and instrumental motivation, in our discussions Gabriel's motivation of learning French seemed instrumentally inclined. As studies have shown that intrinsic motivation is foundational to L2 possible self development, I wondered if the task-guided imagery activities would help shift his motivational inclination towards a more intrinsic approach in the second quarter.

3.5.2.2.2 Interview 2

L2 Possible Selves

During our second interview, Gabriel mentioned the task-guided imagery exercises when I inquired about his evolving sentiments towards speaking and learning French. He expressed feeling "empowered" and "successful" after completing the task-guided imagery exercises, linking these feelings to the concept of "French Gabriel." This term had become familiar to him through his participation in my weekly online office hours where students often discussed the task-guided imagery homework together, referencing their envisioned French selves as "French Angela" or "French Terry," etc. Referring on one task-guided imagery assignment wherein students help a French person retrieve a lost wallet, he said:

> When I say I feel like I have more confidence in myself, [it's that] I was able to help a local and converse in their language. I think when I say powerful, I mean confidence. It's the

> belief that I can speak the language and I can have a normal conversation with the locals. And so, it would just make me feel like a lot better about myself, you know? Like solving a math problem. Like if I was able to solve a complicated math problem by myself, and I got to the answer without any help. I would feel a lot better. Especially if, there's an upcoming test or something and I'm able to do it by myself. Like, 'wow, I can do this. I can actually do it by myself and I know what to do and I know how to do it!' It's validating. It's very validating in this sense.

In contrast to his real-life experience travelling in France where he experienced feeling "lost" and "like a child," Gabriel now reports having more confidence in himself. In his mind's eye, he had a "normal conversation with the locals," giving him conceptual knowledge of the event and allowing him to enjoy the positive emotion from such a skillful performance.

He also appears to have the notions of an L2 language ego, telling me that his French self has traits that differ from his usual self. Embracing these variations, he describes them as part of his endeavor to culturally assimilate and 'fit in,' a notion supported by existing literature (Keeley, 2014; Zakarneh, 2018).

> The other thing I noticed running through [these exercises] was this 'fitting in.' Maybe even being a little rude if I needed to be really French about it! *[laughing]* But you know, just fitting in and that's how a French self would fit in. I don't know if it's just me, but personally, when I travel, I try to look as least touristy as possible because if you can trick yourself into being a local and speaking, [then] it works, right? You can kind of trick yourself into that and into being really French.

When I asked him to describe any French self imaginings he had performed on his own, he told me:

> I saw myself sitting at a cafe drinking coffee eating croissants and baguettes. Yeah, I can see myself living in France, living the French lifestyle. Taking a slower quality of life and

> appreciating food a lot and the leisure, a more laid back lifestyle than what Americans have. I like how the French take eating seriously and take time [to eat]. It's not a matter of changing [who I am]. I know there are aspects of French life that feel more comfortable to me as I am now. I don't think I would change my personality. I just like the way the French live and I can see myself living like that… My dream job is being an airline steward and being paid to travel the world. So, I think I could integrate French into that because - what if I get sent on a flight to Paris or all around France? Or maybe I work for Air France or something, and it's all in French… I think of [speaking French] more as a professional aspect.

Although he did not provide much detail in this 'French self' description, he now reports "seeing himself" in a French context, living like a French person, and adopting French cultural values such as enjoying food and leading a leisurely lifestyle. This is an improvement from the first quarter observations where his L2 self was no more than a "quick little" passing thought. While still nascent, Gabriel's portrayal of his L2 possible self as a French-speaking airline steward has emerged within his working self-concept and holds potential for further refinement.

Another interesting development was his newfound interest in French online content, such as watching French conversations on YouTube, expressing enthusiasm as he imagined himself being present in these interactions.

> Now since I'm taking French, I look on YouTube for fluent French conversation and just listen to it and see. Oh. Wow, it's so fast! Maybe it ties back into me trying to fit in as a local, because when I look [at] fluent French conversation on YouTube, it's like the real deal. And you can hear it. And if I was sitting there listening to the conversation, that would be wild!

Gabriel has actively been nurturing his L2 identity by seeking out additional online stimuli information, and imagining himself in French contexts. He equally mentioned being more

attentive to all things French now as he is "surrounded by it all the time, learning about it." The deeper he immerses himself in the L2 self-schema, the more plausible it becomes (Oyserman & Destin, 2010). The emergence of his L2 possible self is evidenced by his second quarter survey scores, which increased from 5.1 at the start to 6.0 by the end. While still trailing the class average (5.6 at the beginning and 6.2 at the end of the quarter), he has made considerable strides in a brief amount of time in this aspect.

Motivational Intensity

When I asked Gabriel about changes to his motivation due to campus closures, he reported not feeling much of a difference. Despite a more noticeable presence of his L2 self, when pressed, he reverted to emphasizing his instrumental motivations for learning French.

> Socially the STEM classes are right where all the emphasis is. *Then* you're considered knowledgeable in an academic sense…I'm doing really well at [French] and if I didn't care about it, then the hell with it. But I think I care about it because… *[pondering]…* I think it ties back to, it's a class, you know, like I'm earning a grade for it and I don't want my grades to suffer. That's what I think. That's what motivates me to do well in it and to always do the work. It's the grade and in the end if I didn't care and I got a bad grade, it's going to be with me forever and it could affect me in the long run.

Gabriel's persistent focus on academic performance and his drive to excel in school underscore the significance and centrality of his self-schemata in this domain. He was consistent in framing his motivation for learning French within an academic context, acknowledging its value in terms of earning class credits and its potential future benefits in a professional setting. As outlined by Oyserman and Markus (1991), possible selves compete for cognitive attention and expression. The possible self that garners the most focus becomes highly accessible within the working self-concept and exerts a significant influence on individual behavior, relegating other

possible selves to the periphery (Roskos-Ewoldsen & Fazio, 1992; Wilson, 2000).

Presently, Gabriel's positive academic self emerges as the predominant operational self-schema in his life, likely explaining why his primary source of motivation continues along this trajectory. In the second quarter, his survey scores for motivational intensity rose to 5.2, slightly below the class average but significantly improved from the previous quarter. Although he did not see French proficiency as personally imperative, he did seem to have a broader view of the potential personal and professional advantages that studying French could offer, which may explain the increase in his motivational intensity score.

Perceived Competence

During our conversation, Gabriel shared that international travel provides him with opportunities to assess his self-efficacy in managing unfamiliar surroundings. He excels in these challenging contexts, finding personal satisfaction in the positive emotions that arise from successfully navigating them.

> Travelling is like a knife edge. There's this confidence-like power. Like, I've done it! But there's also, this part, which is like, 'Am I going to say it right or [will it be] scary? Can I fit in? Can I make this work? Can I get us there?' I believe I can but, there's a hard part, a I-have-to-work-at-it part...I embrace the intimidation. I like the challenge. I want to go explore; I want to see what's out there. Even though it may be a little bit hard.

His ability to handle such challenges competently and independently holds significant value for him, reinforcing his sense of accomplishment and ability, and allaying his feared self-described as a "helpless child."

> I think a lot of [my language competence] is when navigating, like using transportation. So, maybe it's just me, but if I'm trying to get on the right train or go in the right direction, I try to figure out the language by myself. If I'm at a train station looking helplessly lost,

> I'm not comfortable. And that was the case when I was in France…the feeling of when you're sitting there thinking, 'Oh my God, I don't know how this works.' You're sitting at a train station and you're very self-conscious, right? And there's a feeling of definitely being dependent. Or being almost like a child, like a lost child. I'm a very independent person not only in traveling [but] in everything I do. I'm very independent. So I don't really like the feeling [that] I can't do anything. I need to know what I'm doing. I don't want to feel helpless and lost.

These experiences shape Gabriel's beliefs about himself as a capable person and provide him with valuable self-referent knowledge that has the potential to contribute to his L2 possible self development.

Social reinforcement of our abilities strengthens our belief in them. When significant others have faith in our skills, our self-efficacy is bolstered (Bandura, 1998). Gabriel receives social reinforcement from his family during their travels together, relying on his language skills to navigate their way.

> When we were in Paris, we never got lost. I was really proud of myself. And I was in charge…when I travel with my family, they leave it all up to me because they know I'm good…They just follow me because they rely on me to get them to the right place. We always got on the correct train. We always went in the correct direction.

This social acceptance of his abilities by his family helps alleviate any uncertainty Gabriel may have regarding his performance and reinforces his self-belief as a resourceful traveler with a keen ability to adapt and problem-solve in international settings.

Gabriel's sense of personal control was exhibited when he encountered challenges in his Japanese class. He approached the teacher, saying: "I don't know what to do. I don't understand what's happening. I can get this. I just need to understand a bit more." Here he proactively involved

those around him in order to gather the knowledge and resources needed to overcome learning obstacles. Instead of viewing these difficulties as a reflection of his own limitations, he responds with confidence, harnessing his self-efficacy to resolve any difficulties by mobilizing cognitive resources and action-oriented behavior.

3.5.2.3 Case Study Nadia

Background

Nadia, an international student from Bahrain, had studied in the United States for one year before enrolling in a French course. Raised in a linguistically diverse environment, she was exposed to Arabic, English, and French from an early age due to her father's multilingual proficiency and academic background in France. Her mother spoke only English. Nadia attended a bilingual Arabic/English school prior to pursuing a college education in the United States. At the time of our interview, she had yet to declare a major, but emphasized the significance of speaking French and English in Bahrain for its esteemed status and association with higher education. Nadia also mentioned the practical value of bilingualism, foreseeing opportunities for employment in an international company or the hospitality sector upon her return home.

Before attending French class, she had tried to learn French independently, even experimenting with a hypnosis-based learning technique that involved listening to French audio while sleeping. Finding this method inefficient, she opted to enroll in a formal class at the community college where she was pursuing general education courses. Before coming to class, she had acquired some basic vocabulary and phrases from her father and online platforms like YouTube. She had visited France on multiple occasions, primarily with her family for shopping trips, attracted by the lower prices of fashionable luxury items.

Nadia belonged to the same cohort as Ming and Gabriel, completing one elicitation

exercise and two task-guided imagery activities in the first quarter; and an additional four task-guided imagery activities in the second quarter, bringing her total task-imagery assignments to six.

3.5.2.3.1 Interview 1

L2 Possible Selves

Since Nadia was effectively bilingual before studying French, she had already encountered the phenomenon of having distinct linguistic personas or "language egos" - one in Arabic and another in English (Guiora & Acton, 1979; Guiora, 1994; Keeley, 2014; Zakarneh, 2018). Reflecting on this, she shared:

> I feel like I'm more calm in English, but I'm more energetic in Arabic. Maybe because there's certain words in Arabic that can express how energetic I am, but they don't have it in English.

When younger, Nadia was reluctant to speak English with her father because they had always spoken Arabic together; however, her father implemented a strategy where he would only converse with her in English during specific days of the week, so she found herself compelled to communicate with him in English, which ultimately improved her English proficiency.

Nadia also revealed that before signing up for the French class, she often had daydreams where she envisioned herself effortlessly conversing in French, being able to "truly express" herself without any language barrier. She recounted one recurring fantasy:

> I always talk about this [fantasy]. I love to bake. I always tell my mom, like at a certain point I'm going to move to Paris and just like, bake some bread while I look from a window at the Eiffel Tower.

Several months before our interview, one of Nadia's friends experienced a distressing situation when her child became lost in a Parisian department store. As her friend reported the incident to her, Nadia found herself visualizing the scenario as though watching a movie. In her imagination,

Nadia placed herself at the scene, speaking French to store employees in order to locate the lost child:

> She lost her child in Paris and I don't know when she said that I kept imagining me trying to ask people in French, 'Where is the child? Have you seen the child?'

Nadia mentioned that these imaginary L2 scenarios boost her confidence more than real-life interactions in English. Intrigued, I asked about the reasons behind this surge in confidence:

> I feel like I can express myself in French more than English. Because there are lots of similar words that are in Arabic and just the culture is very similar to mine; [although] until I came to the States, I had never interacted with someone whose mother language was French.

She expressed a belief that learning French would change her in some way. I asked her what specific changes she envisioned:

> My personality. I feel like if you learn about the French language, you will be more as a private person. And I'm not. And I'm trying like to control myself but like. I say things like just. OK, I don't think like people are bad. Everyone is good. And then so if I'm being more as a private person, that will protect me. I can't protect myself in English because…I don't know. I feel like people here are like…they don't care. You know, they express they are bold. Yeah, they are more bold here. They express what they feel no matter what. And like when I try to do it, I somehow say something that will hurt someone. I have to make excuses. I keep thinking about all week and think I should have said it this way. I should have changed this way. Instead of just saying, 'Oh, well *[shrugs]* that's me, right?'

Elaborating, Nadia explained that in her culture, spending money extravagantly does not equate to being truly wealthy. She recounted instances where her newly made American friends, assuming she was affluent, had approached her for money, including requests to pay their rent. Struggling to assert herself, Nadia gave in to these requests, finding it too difficult to refuse them. She explained that if she had been French, she would not have had these problems:

> I think [French people] are private. They give an air…. well…there's certain questions you don't ask, right? People have a lot of privacy, but at the same time, the French are very confrontational. Yeah, they have a lot of confrontations. So, you know, it's very interesting for me in that respect.

Nadia told me she wanted to be more assertive, reserved, and maintain a sense of social distance – qualities she admired in French culture, but felt she lacked. She perceived these characteristics as being more aligned with her home culture, providing her with a sense of security and resoluteness that she did not have when speaking English. Nadia believes that adopting a French persona will allow her to act more decisively without feeling the need to excessively consider others' feelings. Her L2 ideal self embodies characteristics she hopes to possess, mirroring her envisioned personal growth (Markus & Nurius, 1987; Ushioda & Dornyei, 2009).

Nadia mentally envisions herself as becoming French and belonging to an imagined L2 community having the personality traits she valued. Imaginary L2 communities hold significant influence in the realm of language acquisition and motivation. Described by Kanno and Norton (2003), these communities are conceptualized as "groups of people, not immediately tangible and accessible, with whom we connect through the power of the imagination" (p. 241). Through imagination, individuals foster a sense of belonging to these communities, crafting mental images that transcend temporal and spatial boundaries, and thereby shaping their perceptions of the world and themselves. Nadia wants to redefine her identity within the framework of this L2 community, as she has conceived it within her mind (Ryan, 2006). She nourishes this L2 self by mentally envisioning scenarios like baking bread in France while gazing on the Eiffel Tower or conversing with employees in French at a Parisian department store.

Furthermore, the adoption of her French self aligns with her social in-group, resonating closely with her cultural background and bolstered by the social prestige attached to French

fluency in her homeland. The social reinforcement by her cultural community is strengthened by the influence of her father, a French speaker, further cementing its significance in her social sphere. Her survey scores corroborate her excitement about her emerging French identity, scoring 6.6 on L2 possible self development surpassing the class average of 5.5.

Motivational Intensity

Nadia expressed an ongoing struggle to perform well in school, particularly in classes that were less engaging, a challenge she attributed to attention deficit hyperactivity disorder (ADHD). When I inquired about how encountering difficulties in language learning or experiencing negative classroom environments would affect her motivation, she responded:

> I feel like it depends. In your class when I didn't do well on the third exam, I tried to do more exercises and I asked you for more help. But in other classes I just shut down. Because…I don't know. I just feel like it depends on the situation. Like, for example I was in this computer programming class and we had a group work. So, me and this other girl, we did it together and we had to go online where [the professor] corrected it. And in front of me, he gave her full marks. And for me, he gave me three out of five, but we did it together! It was the same answers. And I kept asking him what's wrong, and he kept saying things I didn't understand and I just shut down for the whole course afterwards. When you can't act, or you try to act but you don't get a response, then you feel you can do nothing. I felt like, OK, they don't care. Why should I continue? Like caring about, like a college that doesn't care about my education? I felt rejected and that's emotional. Motivation is an exchange, and it's a social thing. I feel [demotivated] where I've had teachers treat me wrong, I've had people fail me for exams that I've prepared for and they don't tell me why.

In her computer programming class, Nadia's sense of diminished control led to effort withdrawal and reduction, and emotional disengagement. Receiving a lower grade than her peers on a group project, coupled with her inability to discern the reasons for it, significantly hindered

her ability to persevere and be resilient. According to Bandura (1998), the belief in one's capacity to make decisions and take action to influence outcomes is pivotal for maintaining motivation and effectively overcoming setbacks. He writes, “the lack of personal control is often due not to chance or whimsy, but to the unresponsiveness of social systems and barriers they erect to protect vested interests and the status quo” (p. 19). When confronted with a comparable scenario in language class, Nadia felt empowered enough to ask for help and obtain additional practice exercises to improve her understanding of the material. The sense of control she exercised in French class enabled her to stay invested and actively strive for improved results despite the setback of a low exam score. Her initiative to seek help and assistance not only reflected confidence in her ability to grasp the material more effectively (self-efficacy beliefs), but also demonstrated belief in her capacity to regulate the learning environment by requesting action from others and obtain what she needed (perceived control), both of which contribute to enhanced perceived competency beliefs (Williams & Lillibridge, 1992).

Perceived competency is crucial in shaping beliefs about our ability to attain our possible selves. When we feel a strong sense of agency and influence over our decisions and surroundings, we harbor the belief that we can effectively pursue and attain the possible self we are aspiring to become. Moreover, our perception of control can shape the approaches we take in striving toward our possible selves. When we feel empowered, our strategies revolve around proactive courses of actions, setting lofty objectives, and persevering despite challenges. (Narayanan & Ordynans, 2022).

When I asked Nadia what factors could potentially cause her to stop learning French, she revealed:

> Maybe a really, really bad experience in Paris? That's the only thing, yeah. I don't think [a bad experience] in class would just stop me because I have wanted to learn French like for

five years now, right? So, it would have to be something very personal.

Her persistence to learn French was echoed in her motivational survey score (6.4) that was well above the class average of 5.2. I asked her why she had such a strong desire to learn French:

> I think learning French makes you sound more educated. Maybe because of their interest in art and in culture and that type of thing. I love the culture. I really, really love the culture. I feel like they're more independent, like they depend on themselves, like everyone is treated like an adult and there's another thing that I like. In America, cartoons and like children's movies are all about happy things, and stuff like that. But I watched a couple of, French cartoons and they're so dark and I love that because I took an art class. And [the professor] told us how this [kind of art] could teach kids about life when they grow up, right? How to deal with disappointment, because life is not roses.

Language research conducted by MacIntyre and colleagues (2009) revealed that the most prominently identified trait of both current selves and of L2 possible selves amongst university students was the desire to be an educated and knowledgeable person, exemplified by the ability to speak more than one language. In this study, the researchers looked for overlapping traits existing in both the current self and the envisioned future L2 self, aiming to determine whether the presence of the same characteristics in both selves was indicative of future L2 possible self development. They sought to explore the integration of the present and future selves in order to examine how various elements of those selves worked together psychologically to motivate learners. They determined that the psychological need for such an integration was higher for self-relevant items that were personally valued by the learner (intrinsic items), compared to items reflecting extrinsic attitudes and beliefs which could fluctuate contextually. Correlations were found between intrinsic characteristics common

to both the current and L2 possible self such as having an integrative motivational approach to language learning and well-developed L2 possible selves.

In this case, Nadia associated learning French with the perception of being a more educated individual. She saw being educated as synonymous with facing the complexities of life directly, which she believed was inherent in French culture. Nadia viewed this cultural trait as more pragmatic and conducive to preparing individuals for real-world challenges. Conversely, she viewed American culture as overly optimistic and hesitant to face life's darker realities, a perspective that did not resonate with her own values. Nadia expressed her aspiration to emulate these perceived French qualities by learning French and embodying the characteristics of a cultured individual who confronts life's challenges "like an adult." As demonstrated in Ming's case, Nadia's personal values are attached to her L2 possible self traits, drawing her into an intrinsic motivational path leading to higher motivational intensity and persistence (Ames & Archer, 1988; Blumenfeld, 1992; Dweck & Leggett, 1988; Hock et al., 2006; Ryan, 2009).

3.5.2.3.2 Interview 2

L2 Possible Selves

At the time of the second interview, Nadia had started watching YouTube channels of influencers living in France. She admitted that it helped her feel less lonely now that the French course had moved online due to Covid-19 campus shutdowns:

> I watch a show called extreme French on YouTube. They talk slowly, but not too slow, but in a funny way. No subtitles, so you can understand. They make jokes. It's old but it's helpful. And what I like is they keep saying the conjugated verbs. When I first started watching it for like one week, someone would talk to me in either Arabic or English and I would like accidentally reply in French and I couldn't like go back. *[giggles]* And then I was

like, imagining, what if it really happened and I was like, traveling in the train, speaking French, like learning the actual culture.

She mentioned she still experienced lucid daydreaming of her L2 French self, despite the lack of in-person French class. She said the task-guided imagery exercises had helped her to have more visualizations of herself in various settings, including eating at restaurants and cafés, lounging in museums, or walking down the rue de Rivoli in Paris. She admitted that the classroom environment was more engaging and dynamic, unlike the online asynchronous French course, where she confessed, "When looking at the [computer] screen, my mind will just go blank sometimes."

Before campus shutdowns, she maintained three separate French notebooks: one for homework, one for class notes, and one for "finalized thoughts and ideas about how French works," intending to keep it as "a reference for life." However, since the Covid-19 confinement measures, she admitted to abandoning these notebooks, stating, "I now take screenshots with my phone of the online lectures and things like that, but it's not the same as writing it in the notebooks." In her survey scores, Nadia reported a slight dip in L2 possible self development, meeting the class average score of 6.2 compared to her first quarter possible self score of 6.6. She attributed the decrease to her struggle to maintain focus in the online-only classroom environment, saying that prior to campus closing, she felt she was making good progress in French.

Despite struggling to maintain focus, Nadia recounted a story to me that appeared to have greatly influenced the development of her L2 self. Several months before our second interview, she had flown back via Paris when returning to Bahrain for winter break. Due to a delay in her originating flight to Paris, she realized that she would not be able to make her connecting flight to Bahrain. She contacted her American travel agent to rebook the flights, however the agent advised her to take the originating flight and request to speak to a manager in Paris to rebook the

connection, assuring her that the airline would accommodate her request. Once in Paris, she spoke to airline personnel, but they were unwilling to rebook her on the next available flight, refusing her requests to speak to a manager. She found their stance firm and their demeanor cold, stating they had policies to follow:

> The French airline agent, she said 'no' in a firm way, not smiling or anything. I felt bad for a couple of seconds and was thinking, 'Why is she so rude and she doesn't want me to go back home? Why would she say no?' And then I took a moment to think back to French class when we talked about culture, and I tried to stop myself from thinking bad and not crying. [I told myself] 'OK, it's just the culture.' It helped me and I thought 'this isn't personal. This is just French. This is just French people. This is the way it is'. Yeah, because I was about to cry. But then I thought 'OK, wait. I need to think more about the situation and just how she is being.' Afterwards I tried talking to her in French trying to solve the situation. And I understood more that, 'OK, she's trying to help, but this is like the culture. Yeah, this is something that she does. She's not willing to get the manager because of the culture'. I feel like knowing or reading about the culture and going to visit these types of places is different from when you're a local and you know the real experience, the [real] culture and not the culture that is made for tourism. Because even if I went to France and I went to all the places that are recommended or known by tourists, it's not like what I'm if I'm shown that place by a local. And so, to be a knowledgeable person is somebody that knows the situation at a local level.

During this challenging event alone and overseas, grappling with uncertainty and cultural difference, Nadia recalled discussions from French class. Employing this conceptual knowledge, she effectively gained control over her emotions and decided to adapt to the cultural context before her. This enabled her to confront unfolding events with a sense of composure and detachment, fostering the perception of increased L2 competency. She felt genuinely immersed in and adept

at navigating this cultural situation, transcending the label of tourist to embody the essence of a 'real' French person.

Motivated by this newfound confidence, Nadia decided to engage with the airline staff in French, as if she were a French person, asserting herself politely yet firmly. This assertiveness led to the successful rebooking of her flight that same evening. Once in Bahrain, she recounted the experience to her family and friends, emphasizing her ability to communicate in French to resolve the problem. Proud of her accomplishment, her family shared the story on social media, boasting about their daughter's fluency in French, which imbued Nadia with a profound sense of empowerment and confidence.

> I think because [French] is more prestigious and people view it as really hard, yeah. And when my family post videos about French on social media, people that I know keep asking me how do you know how to speak it? [It's] so hard! Right? So, there's this reputation that it's a hard language. It's a very elegant, very prestigious language. And so, the fact that I've been doing it for all year and that I was in Paris and communicated and all that, it made my parents very proud. I feel they respect me more because I speak French.

This experience marked a pivotal moment in her French possible self development and appeared to have displaced her English self to some degree upon her return to the US:

> One day I will act a lot more like a French person. I think I told you in the first interview that it's hard for me to say 'no' or to have some boundaries. So, actually after learning French I've started to say 'no' like the lady at the airport. And I started… I don't know how it happened, but I know it happened because of French class and our imagination stories. When I don't want something, I just set a firm line that's 'no.' It's like a French me says no. Yeah, in English, I feel like I always have to make an excuse because English is very passive aggressive. And I have trouble with that because I'm a very direct person. I communicate very directly and my American people, sometimes they don't like it. But I

> feel like [communicating directly] is healthy for your state of mind. So, in French I feel I am stronger and even a couple of weeks ago, I was put in a situation where I have to make a choice either to say yes or no, and if I said no, I might hurt one of my friends. But it's something that was a no for me and, so I was talking with my other friend about it and I told her, 'I speak French. I don't need to do this.' It was a marriage proposal back home that my family organized and I just didn't feel like it was right for me. I am educated and he has no English or French, nothing, and an early high school education. So, should I say yes to being unequal partners? So, I understand it's difficult because I don't want to make offenses to people. But at the same time, I speak French so, I don't need to do this. I have…I have other choices. I feel like [speaking French] gave me powers. It gave me superpowers because I couldn't say no until I got to France and then everybody's so rude. Well, it's the culture, right? Everybody's so different, I thought what's happening? Oh, my gosh. You know? And so then I started to defend myself and friends. No. No. No. And then I learned how to how to communicate better and more healthy. Yeah. And so, it did, it gave me superpowers!

Nadia's interactions at the Parisian airport, where she embraced her French possible self identity, appeared to greatly enhance its development. This real-life encounter, primed by the task-guided imagery activities, provided her with a significant opportunity for L2 mastery, boosting her L2 self-efficacy beliefs outside of the academic environment, where she struggles to maintain focus. Her recounting of this pivotal event and its profound effect on her self-confidence in other aspects of her life exemplify the internalization of her L2 French self within her current identity narrative. She leverages this transformed identity as a resource, reshaping her self-esteem, her perceived value in relationships, and her capacity to assert herself.

Mastery experiences provide significant information to us about who we are and what we are capable of. They exert substantial influence because they represent the most genuine evidence

of our potential for success. Unlike vicarious experiences, which entail learning through observation and comparison, mastery experiences foster a broader sense of self-efficacy that, when applicable, can be applied across domains (Bandura, 1998). In Nadia's case, her mastery experience in French has enabled her to perceive herself as a stronger, more desirable, and more French-like woman, "having superpowers."

Motivational Intensity

Nadia shared that prior to the Covid-19 campus closure, she took advantage of the complimentary French tutoring sessions offered in the student union building. It was during these sessions that she crossed paths with Edith, a francophone student-tutor hired by the college. Their initial interactions led to grammar explanations over coffee which gradually blossomed into a closer friendship. Edith spent time with Nadia, offering explanations on class assignments and engaging in French conversational practice. After the campus shutdown, they maintained their connection through Zoom meetings, which proved instrumental in alleviating Nadia's sense of isolation during Covid-19 confinement measures.

> I felt like there is always a source that I can rely on and I feel very chill talking to Edith and I can ask her my [French] questions, because I'm not embarrassed like in the class. If I have a question [in class], I hesitate because there is an audience. But with her, we keep practicing even now, I think we're friends. Yeah, that even after tutoring, sometimes we will just hang out and talk in French. And she's in some way making me memorize [verbs]. She will just write them and it will just click to memorize them. Yeah, and in fact, I had another experience like last time I was in the Paris airport. I tried [to speak French] and I think I did good. [The airport personnel] didn't know any English and I had to force myself to speak with him in French, asking for a hotel to sleep in and he told me where to go and I understood him. I felt blood rushing to my head, like trying to remember what to say.

> And I didn't think it was good, but when I came back, I asked Edith. And she said it was really good!

Working with a fellow college student who was a native French speaker not only cultivated Nadia's L2 possible self, but also bolstered her L2 confidence. The informal nature of the tutoring sessions provided a more relaxed learning environment compared to the more structured French course, allowing Nadia to absorb the material more effectively with fewer distractions and less performance pressure. Moreover, this interpersonal connection helped diminish Nadia's shyness and language anxiety because she could practice speaking French with Edith in a low-stakes environment as opposed to in front of a class. Nadia reported that despite campus shutdowns, the continued tutoring sessions with Edith had helped her maintain motivation to learn French, a fact that was reflected in her survey score at 6.2 which was well above the class average at 5.5.

During spring break, Nadia found herself in another encounter with French airport staff, where this time, she immediately chose to converse with them in French. Although the staff seemed to understand her, upon her return to the U.S., she was unsure whether she had used the right vocabulary. Asking about this during a tutoring session, Edith told Nadia that she had chosen the correct vocabulary, validating Nadia's L2 proficiency and further bolstering her confidence. Moreover, with Edith as an intermediary, Nadia had expanded her French social network on campus, exposing herself to new and different social interactions and activities in French. This enriched her language learning experience and fueled her motivation to continue studying French.

Nadia's positive interactions with Edith represented a form of social reinforcement that shaped her beliefs about her own competence. Social reinforcement is a powerful way of assessing our abilities because it helps to alleviate self-doubt and allows us to evaluate our self-perceptions (Williams & Lillibridge, 1992). When learners encounter challenging experiences or negative emotions in their learning journey, they tend to harbor pessimistic beliefs about their capabilities,

subjecting themselves to undue and severe self-criticism. Positive social acceptance can counteract these negative experiences, providing learners with alternative avenues to assessing their potential. The beliefs formed through social reinforcement significantly influence learners' decisions regarding task selection, the amount of effort they invest in the task, their persistence, resilience, and ultimately, their achievements (Bandura, 1998; Schunk & Pajares, 2001).

Peer influence is a crucial element of social reinforcement, with model similarity being one of its significant mechanisms. When individuals observe others who resemble themselves succeed, it can significantly boost their self-efficacy. This effect is particularly strong among students who are uncertain of their own abilities, such as those who have encountered previous challenges (Bandura, 1986; Filade et al., 2019; Schunk, 1987).

Peer influence holds significant sway during adolescence and young adulthood due to the similarities among peers and the shared experience of encountering novel activities simultaneously (Steinberg & Monahan, 2007). Peer influence extends through networks of large groups of peers with whom students associate, shaping their opportunities for interaction and peer observation, as well as access to peer activities (Filade et al., 2019; Fujimoto & Valente, 2013; Pinheiro, Santos, & Pacheco; 2014). Over time, network members tend to become more alike, as discussions between friends influence activity choices, leading to similar preferences (Filade et al., 2019; Pinheiro, Santos, & Pacheco; 2014). Building on this is the crucial role that peer groups play in the socialization of motivation. Changes in motivational engagement over an academic year can be predicted by initial peer group affiliations, with highly motivated groups fostering positive changes and less motivated groups leading to negative changes (Wentzel, Donlan & Morrison, 2013).

During our conversation, it became evident that Nadia felt a strong connection with Edith

as a peer on multiple levels. They shared the experience of being international students at the same community college, studying modern languages, speaking French, and being of a similar age. As Nadia began regularly meeting with Edith, and eventually her circle of friends, she expanded her L2 social network, frequently gathering for coffee at the student union and conversing in French with her newfound companions. This helped solidify her arrival into this social group and her sense of belonging within this L2 community, consequently fueling her motivation to continue her French language studies (Ryan, 2006; Wenger, 1998).

In addition to working with Edith, Nadia informed me that she had begun implementing study strategies for her French class, such as using flashcards. She explained that previously, she lacked a structured approach to studying French, but now felt empowered because she had a clear plan of action to prepare for upcoming exams. This new study method provided her with concrete and identifiable actions towards closing the gap between her current self and her desired L2 possible self, increasing its self-regulatory effect (Hoyle and Sherrill, 2006; Oyserman, Bybee, Terry, & Hart-Johnson, 2004). Knowledge of a successful performance can then be retrieved and utilized in cognitive processes related to self-perception, goal establishment, and behavioral choices (Bandura, 2012; Honicke & Broadbent, 2016; Schunk & Pajares, 2002). By having actional plans towards improving her L2 proficiency goals, Nadia further strengthened her French self development (Oyserman, Bybee, Terry, & Hart-Johnson, 2004).

3.5.2.4 Case Study Henry

Background

Henry, a Canadian by birth, was raised in a small town situated in Southern Ontario province. Although English is his primary language, he was introduced to French during his schooling from grades 1 to 9, as it is a standard part of the curriculum for all Canadians, given

French is an official language of that country. He and his wife had been in the U.S. for three years when he enrolled in French class to fulfill his final business degree requirements. He intended to graduate after finishing the two remaining French classes required for his degree. He chose French due to his previous exposure to the language; however, he remembers his former French classes as a negative experience, saying:

> Nobody gave a damn, you know? And so when the [French] teacher would come in, everyone was like on vacation. And also, it wasn't very interesting. And then, first grade to 9th grade is a long time. It was just a feeling of, 'nah' *[shrugs shoulders]*. After 9th grade, it was required for high school and then after that it was like, 'you don't have to do it anymore' and why would I? Because it had been kind of boring. I mean, I knew some of the basics, but other than that I mean…I didn't really think about it. People said if you learn French, you'll get a better job - a better job with the government. So, there's a nod to bilingualism. It's considered a good thing. They put it out there like that.

He expressed that growing up he did not have any concrete plans for his future. Rather, he encountered opportunities as they arose, deciding spontaneously to pursue them or not. After working in low-wage positions for several years, he made the decision to enroll in community college to obtain a business degree for better earning potential.

During the first quarter of observation, Henry was in Group 1, where he completed two elicitation exercises, but did not participate in any task-guided imagery activities. Subsequently, in the next quarter, he transitioned to Group 3, where he engaged in four task-guided imagery activities, but did not complete any further elicitation exercises.

I chose Henry as my rival case study for this project. Despite completing four task-guided imagery exercises, his L2 possible self development remained unconvincing and his motivational intensity continually lagged behind the class average. While some gains may have been made in

terms of acquiring a more global perspective and awareness, the evolution of his L2 identity appeared hampered by insufficient competency beliefs and daily life stressors.

3.5.2.4.1 Interview 1

L2 Possible Selves

At the time of the first interview, Henry seemed mildly withdrawn and guarded. I asked him if he ever had lucid daydreams of himself speaking or using French in any capacity. He responded:

> Trying to grasp… Yeah, it's more like…there are ideas and there are things, but the images aren't like…so, it's not exactly like watching a film. Like you can't be, 'I'm wearing this, and this is the smell, and this is what I'm hearing', right? It's more of an idea of where I want to be. I don't know exactly what I want that picture to be. I don't think about it yet, right? I think it's still kind of new for me.

I pushed further asking him if perhaps he had experienced any encounters at school or off campus that had inspired him to mentally project himself forward in the future in an inspirational or positive way. He told me:

> I don't…I can't think of anything right now. I mean…every day when I'm on the bus…that's when I daydream a lot. It's when I'm on the bus. It's like, yeah, along the bus and it's just... yeah, you have time. One of the ideas I have of a movie is like the bus and I don't know, I just… I get it on there and…*[shrugs and stops talking]*.

In our discussion, Henry struggled to articulate his possible self images, not only in the context of French language learning, but also more generally. He found it difficult to mentally 'see' projected images of his future self, mentioning that he does not envision himself in the future as if watching a movie, but instead he experiences passing thoughts about what he would like to do or where he would like to be. He went on to describe an unengaging language learning

experience in grade school, where teachers presented bilingualism as "a good thing," however, the potential benefits of speaking French were not made prominent to him in school. His inability to describe his L2 future self suggests that he lacked cognitive self-schema in this domain and therefore these potential components of his identity are currently not available nor accessible in his working self-concept (Norman & Aaron, 2002). He admitted as much, saying that he does not really "think about it yet."

The undeveloped L2 possible self was reiterated in his survey scores where he began the quarter with a neutral score of 4.5 compared to the class average of 5.0. After completing the two elicitation exercises, his score rose to 5.1, but was still below the class mean of 5.4. I was curious to see if the task-guided imagery activities would allow him to build self-schema in the L2 domain by training his focus onto himself as a competent French speaker, an area that he normally did not contemplate.

Motivational Intensity

In the initial quarter, Henry's level of motivational intensity started relatively strong at 5.8 compared to the class average of 5.4. However, over the span of the ten-week course, his score declined to 4.4, whereas the class average rose to 5.6. Exploring the cause of this decline, I asked Henry about his motivation and whether he envisioned incorporating French into his future plans, to which he responded:

> I doubt it. I seriously doubt it. Actually, me and my wife were talking yesterday. So, she came home from work and she's like, 'We should do a brain dump, you know?' That's a really good idea just to have, like, a brain dump or like a dream board… *[ponders]…* Yeah, it's like a dream board because, I think, especially me and her right now, it's like we're both working and going to school and like the personal stuff kind of just takes over. It's like, 'what's for dinner?' And then, 'OK, do I have clothes to wear tomorrow?' and yeah. OK,

> bedtime. So, yeah, the dream board, it helps focus motivation or focus desire. I don't know. I think sometimes what's stopping us is like the 'how to,' you know?...We just don't know how to get there because we can dream about it, but then there's the gap. There's that gap. And that's the part that's the most difficult. *[frustrated]* How do I get a foot into the door somewhere where I haven't really been? Have no experience, no nothing.

Refocusing him on his language study, I pressed for more insight by asking Henry if he could possibly envision a scenario in which he might utilize French in the future. He responded:

> Yeah, I'm thinking…. well, one dream that I've had was like…growing up there wasn't anything to do. Like for kids, nowhere to go. So, if you don't have any money to go somewhere, you're just out. They're causing trouble or whatever, you'll find something to do eventually. What is it? Idle hands do the devil's work. [I] kind of wanted to create something where it's like a place for kids to go. I think if I had the opportunity to do something like that, and it would be that we needed someone to speak French, like a bilingual thing, then I would [speak French] maybe…*[shrugs]*…I don't know. I haven't really given that much thought into it.

Henry appeared detached from discussing his L2 future, unable to delve into specifics. He did not appear to have any concrete intentions to use French after graduation. He described being consumed by the pressures of everyday life and admitted that he had not given much thought to his post-graduation plans, making it difficult for him to articulate any aspirations.

Bandura (1998) states that perceived control has its primary effects on action regulation and on response initiation. Response initiation is the process by which an individual begins a behavioral or cognitive response to a stimulus or situation. It plays a crucial role in various cognitive processes, including problem-solving, decision-making, and goal-directed behavior (Bandura, 1986). Despite expressing frustration about not knowing how to get his "foot in the door somewhere" and bridge "the gap" between his current situation and his future, Henry

remained unable to pinpoint what this desired future comprised. This left him unable to set goals and decide upon a course of action towards achieving them.

Moreover, he admitted to not putting much thought into his future plans, taking a reactive instead of a proactive stance to his circumstances. The deadlock he finds himself in highlights his perceived inability to initiate action towards controlling his life's direction, and the absence of foresight, compounds this paralysis as foresight is the causal mechanism for goal setting and engaging in purposive behavior (Bandura, 1998). This situation seemed critical for someone who was so close to graduating. Henry continually pivoted away from the subject of language learning in our interview, straying towards other topics, and repeatedly mentioning the stress of daily life.

Krueger and Dickson shed light on the reason why individuals may avoid planning and goal setting, stating that individuals lacking confidence in their abilities perceive future scenarios as ambiguous, ill-defined, or excessively uncertain, leading them to shy away from visualizing plans associated with them, due to the anxiety they provoke (1994). This perpetuates low self-efficacy and pessimistic outcome expectations connected to any attempted changes. The absence of goal-setting, combined with a scarcity of cognitive future self-guides, complicates long-term planning and projections, leading individuals to primarily concentrate on present-day activities.

To further assess Henry's resilience and motivational thinking for studying French, I inquired how he would respond to setbacks in language class, such as receiving a low exam grade, and if this would affect his motivation to learn French. He responded:

> I would just say I didn't prepare or I'll probably say I messed up. Yeah. Or things like that. Like, 'Oh well, I didn't study.' Or like, 'I should have done this or I could have done that. But sometimes it's more than that…if I feel like I did put in that effort, then I feel like it's a personal attack sometimes. You know? It is like it doesn't make much sense. It's just not adding up. So, I don't care about the class anyway…or some sort of way of minimizing it.

> I've given up on a lot of things, and I have nothing to show for it. You know, you just kind of bounce around, bounce around…I hate my [business school] internship. I'm not really enjoying what I'm learning at school most times…But what I need to focus on is… [speaking to himself] 'Where are you trying to get to?'

When questioned about his approach to handling academic setbacks in French, such as receiving a low exam score, Henry initially suggested that the grade might result from insufficient studying. However, he quickly shifted his stance saying that the negative test score was sometimes "a type of personal attack," presumably from the instructor. He then expressed his intention would be to "minimize" the event by telling himself "It doesn't make much sense. It's just not adding up. So, I don't care about the class anyway." In doing so, Henry distanced himself from any responsibility for the exam result and attributed the difficulty to external factors beyond his control. This strategy allowed him to maintain his self-efficacy beliefs in the face of anticipated negative feedback.

In my conversations with Henry, I observed several signs that were indicative of self-handicapping behavior. This psychological defense mechanism stems from the fear of being unable to demonstrate competence, and can be activated by significant occasions or evaluative events such as job interviews, important exams, or perhaps in Henry's case, being interviewed by his professor (Rhodewalt & Tragakis, 2002; Zuckerman & Tsai, 2005). Initially conceptualized by Berglas and Jones (1971), self-handicaps are defined as hinderances to performance that are construed by an individual to enhance and protect fragile self-efficacy beliefs. The impediments to success allow individuals to deflect responsibility for failures and strengthen attribution for successes. Individuals may voluntarily adopt or assert impediments when facing uncertain future outcomes or when there is no apparent external explanation for subpar performance (Thompson, 2004). Interestingly, self-handicapping does not undermine immediate performance and has been

shown to improve self-esteem prior to stressful events (McCrae & Hirt, 2001).

In academic contexts, self-handicapping behavior is often linked to learning environments that promote fixed-trait theories of competence (Dweck, 2002; Rhodewalt & Tragakis, 2002). Individuals exhibiting this behavior tend to resort to avoidance as a coping strategy and typically experience diminished intrinsic motivation in school (Zuckerman & Tsai, 2005). A common characteristic of this defense mechanism is the tendency to provide ambiguous interpretations of difficulties and attribute successes to mere chance (Rhodewalt & Tragakis, 2002).

Henry described abandoning "a lot of things" and depicted himself as "bouncing around" in life, indicating his lack of direction and an avoidance of purposeful action toward future goal-setting and planning. The inclination to attribute potential failure to external factors, highlighted his perceived lack of competence. His nonchalance and lack of enthusiasm for his future was unexpected and concerning, considering he was on the brink of completing a university degree, which naturally demands a considerable level of dedication and persistence. I wondered that he described himself as unable to sustain long-term motivation, abandoning projects and having "nothing to show for it." Developing robust control and competency convictions in more areas of his life would be essential for him to find and sustain the necessary motivation towards long-term goals. This would also enable him to nurture and develop cognitive self-schemas in new activity domains, such as working in a sought-after position within his field of study or achieving proficiency in French. Given the unknown nature of these novel domains, they may feel threatening to his uncertain competency beliefs, causing him to hesitate and undermining his motivation.

Henry also acknowledged experiencing little enjoyment or interest in his internship and college courses, but he continues nonetheless, compelled by the requirements for his diploma. He

seemed resigned, like a soldier marching to the battlefield, driven not by passion but by the fear of repercussions for deserting. This scenario exemplifies the avoidance of punishment model of motivational behavior, a characteristic feature of extrinsic motivation (Yashima, 2009). The absence of intrinsic motivation may present obstacles for him in cultivating and nurturing L2 or other cognitive self-schemas because his pursuit of these selves remains externally regulated, preventing their internalization into his self-concept (Yashima, 2009).

3.5.2.4.2 Interview 2

L2 Possible Selves

One of the possible self elicitation exercises that had been assigned in the first quarter prompted students to enjoy their morning coffee or tea from a bowl rather than a mug, emulating the rural French custom. This tradition arose due to the historical scarcity and costs of mugs, whereas bowls were commonplace. Consequently, it is still customary in French rural areas to serve morning coffee or tea in bowls. Henry alluded to this exercise in our second interview when I asked him about his desire to understand the perspectives of French people, an item he had ranked as important in the second quarter survey.

> You know, I don't think it's that has anything to do with 'Frenchness'. I think the key is just understanding people, like their history or what they've been through and what makes them form opinions. Like, what has that person seen or been taught or to make them react that way. It's not about what they're doing or what they're saying. It's more like why they're saying it. You know, why do [French people] get out in the street and march every time they're upset? For example, these types of things or something as small as, like why they drink coffee in a bowl. Well, because on the farm they didn't have mugs. That was like,

you know, like that was something else you had to buy - coffee mugs, just bowls are easier. Simple.

During the second interview, Henry appeared to have a greater appreciation for cultural diversity. Previously, he had characterized his L2 learning journey with disinterest and as "a vacation," noting a lack of seriousness from both teachers and students. His prior language learning experiences had failed to foster an awareness of himself as an English-speaking member of a global community, a concept referred to by Ryan (2006) as having an *international posture*.

An international posture in language learning denotes an attitude that emphasizes openness, cultural sensitivity, and a willingness to engage with diverse linguistic backgrounds and perspectives. Ryan (2006) argues that adopting an international posture is essential for nurturing L2 possible selves, and it is the responsibility of language educators, parents, and significant others "to shepherd learners toward a vision of ideal L2 selves and an awareness of their participation in this community" (p. 441). Embracing an international posture enables individuals to position themselves as integral members of a vast global community. This perspective underscores the importance of expanding language and cultural proficiency, empowering individuals to navigate diverse environments and enrich their identity in their native language and beyond.

Despite growing up in a country with multiple official languages and cultures, Henry's upbringing and schooling did not expose him to the diverse perspectives necessary to cultivate an international posture and therefore he lacked the ability to connect external events from various linguistic and cultural communities to his personal life and experiences. It is possible that the task-guided imagery prompted him to consider this perspective, sparking his curiosity of learning about French cultural viewpoints. Although he did not offer vivid portrayals of L2 self-schemas, his newfound curiosity and expressed interest in understanding L2 perspectives suggested personal growth in the L2 domain and represented a significant departure from his previous indifference.

I inquired whether he had encountered any vivid daydreams involving himself speaking or utilizing French in any way. He responded:

> When I was reading the scenarios you gave us, like the French imagination exercises, I first read them and I just let them sink in. I don't know, it's… [trails off] I found it hard to communicate what I was envisioning. I don't know if that makes any sense, but it just made me feel pensive. I don't know. I don't think I could see myself speaking French even in those moments, though, I think that was the thing. So, I don't think I can. Or maybe I can, but I just haven't yet. *[pondering]* I think it was probably the first time being asked to see myself that way. It wasn't like, 'Oh yeah. I'm ready to get on this train', it was like, 'Wait a minute. I have to think about this'. I saw it more like a traveler rather than I was born in France or anything like that. I was just a traveler. Just someone who, like a tourist or something, but somebody who can speak French or at least enough to give the guy back his wallet. Yeah, like maybe I've been living there for a year or two. I think the exercise made me think about something like that on my own after. I mean, I was just talking about [the task-guided imagery] with my wife. And we can see ourselves living in Europe. And so, I don't know if it's like France, but I could, I think. After it's in your mind already, you know, so it kind of reappears again. It's easier once you've already imagined something like that. It's easier to imagine maybe another scenario after, because it's fresh.

Henry intimated that the task-guided imagery exercises had stirred him to perceive himself through a previously unexplored lens. He seemed to have a new perspective of his second language journey which starkly contrasted with his previous experience. He still grappled with envisioning himself in a future L2 context but he appeared more interested in his language learning endeavors. Where previously he had dismissed French proficiency notions as personally irrelevant, he now appeared to entertain the idea that maybe he could speak French aptly one day, saying, "maybe I can, but I just haven't yet." Seizing the moment, I asked him to provide me with more detail:

> I've just always been interested in Holland, and then sometimes things just align and that's where I kind of think of first [during the task-guided imagery]. Yeah, I mean, I could just see if jobs are there and see what happens. I mean, I'm not really worried about [jobs] too much, like I feel like we can find something to make it work no matter where we go. I don't think [the future visions] are specific though. I don't think, 'Ok. They drink this type of beer in Holland we should have this type of beer', and things like that. Because we're not so much into, like beer or anything, but maybe like it's just the way of life or attitudes or mindsets, I think. Well, for me anyways.

Henry shared that he had never been asked to reflect on himself in the manner prompted by the task-guided imagery exercises. He noted that his visualizations during these activities still felt vague and unclear, but the underlying concepts and emotions from performing the activities had persisted, resurfacing repeatedly. While the exercises did not appear to encourage the development of a vivid French possible self, he hinted at the idea of him and his wife living abroad in Holland. He briefly alluded to an interest in the Dutch lifestyle but did not clearly articulate its personal significance, nor did he express a desire to integrate into Dutch culture or acquire the language. His equivocal manner, the lack of depth when pressed, and his inability to discuss the intrinsic significance he attributed to these superficial L2 self-images left me unconvinced of their saliency - a fact that was supported by his second quarter survey results. Despite a slight increase from 4.7 to 5.0, his scores still lagged behind the class average, which had risen from 5.4 to 5.9.

I should state here that the survey instrument was tailored to assess L2 possible selves specifically within the realm of French studies, rather than encompassing L2 selves from diverse linguistic communities. Overall, Henry's French possible self scores showed minimal change between the two quarters, indicating a persistent lack of development in this area. However, it is worth noting that in our discussions, Henry exhibited positive shifts in his L2 perspective and

seemed to embrace a more open position to language learning, suggesting the potential for further development within a supportive environment.

Motivational Intensity

Observing Henry's survey results, I noticed that his motivation had notably diminished since first enrolling in French class. Considering his fragile competency beliefs and the lack of L2 possible self development, this decline was not unanticipated. A sense of competence and control is vital for sustaining dedication and perseverance in long-term pursuits, such as language learning. His motivational vigor had dwindled from 5.8 to 4.8 since the first quarter. In contrast, the class average had remained static around 5.3.

In his survey responses, Henry had expressed a desire to learn more about French culture, prompting me to inquire further about this interest:

> I've already watched some French cinema and things like that. This is what interests me and I used to be really into buying DVDs and then watching the extras and see what the directors are saying, and they'd always point back to something like, 'this is where I learned this or this is how I got the idea to do it this way'. And a lot of it came from French cinema. So I was like, 'Whoa. Let's see what this is' *[shrugs]*. That kind of faded away. I just lost time and things like that to really dive into it, but other things happened. Life. Yeah. I just… A lot of time needs to be taken to really soak it in. You can't just watch a couple [of films] and be like, 'yeah, I get it'.

Henry expressed a desire to learn more about French cinema and other cultural mediums, yet he points to external factors, such as "life," as obstacles preventing him from focusing more intently on this pursuit. Henry often made unproductive attributions of his inability to accomplish his endeavors. Once more, I sensed that he might be employing self-protective strategies to conceal any apprehension about appearing incompetent or uninformed. According to research on

self-handicapping motives, the prospect of evaluation often prompts individuals to engage in such a defense. They may verbally express that obstacles to performance are already in place, and I speculated whether the interview process had made Henry feel scrutinized, thus activating this defense mechanism.

Strong self-efficacy beliefs help prevent self-handicapping behavior, because individuals with robust competency beliefs feel that a greater effort on their part will result in greater performance. This performance expectancy has a contingent reinforcing component where success is tied to individual skill and effort. Research indicates that a consistent track record of non-contingent success is a significant contributor to self-handicapping behavior (Rhodewalt & Tragakis, 2002; Thompson, 2004). Such a track record can cultivate a belief that one's achievements are not the result of deliberate effort, but rather a stroke of luck or an involuntary ability to triumph over obstacles. In these instances, individuals lack a clear sense of their own role in their successes and the rewards they receive, deep-down feeling uncertain of their competence and abilities.

One antidote to non-contingent success patterns, is to build a history of contingent-reinforced successes based on the individual's skill and effort (Thompson & Hepburn, 2003). In academic settings, this can be achieved through increased student autonomy. Less instructor directive and autonomy-promoting class assignments and environments foster an increased perception that student outcomes are the result of their own effort and ability (Houlfort et al., 2002).

While the task-guided imagery exercises within this pedagogical intervention aimed to facilitate French proficiency (mastery) experiences and thereby enhance students' L2 self-efficacy, they were not intended to address non-contingent success patterns. In fact, autonomous imagery

was discouraged in these exercises in order to mitigate the risk of students envisioning negative L2 encounters. The prescriptive nature of the task-guided imagery exercises did not encourage autonomous visualization. Instead, the outcomes were predetermined for students, enabling them to achieve success regardless of their personal beliefs about their L2 abilities. If Henry's lack of self-efficacy beliefs were deeply ingrained, the task-guided imagery would not have been effective in convincing him otherwise, as he would most likely view the successful L2 outcomes as contrived, and not linked to any real personal potential to become proficient in French.

I wondered about the potential impact of Covid-19 confinement measures on Henry's motivation in French class. I asked whether this had influenced him negatively and if so, in what manner:

> I think so. There's no social thing going on. Yeah, it was a lot easier I think last quarter for sure. I mean, I'm stuck with French class. *[shrugs despondently]* I'm stuck with it. It's a lot harder to do the talking exercises. I feel like the hardest part is the talking exercises and that makes sense, right? Because you're not getting…you're not able to lean on other people in the class to do a lot of the interaction. Yeah, so sometimes the first thing that comes out of your mouth isn't the right thing, so you have to kind of keep working it out and, well… *[shrugs and stops talking].*

Henry admitted that the decrease in social interaction and lack of peer reinforcement due to campus shutdowns had affected his motivation negatively. In addition to this, Henry revealed that he did not feel comfortable being in unfamiliar or foreign environments. I asked him to talk about this more, as I pondered where this could stem from and whether this could be connected to his low sense of competency:

> Because I'm already an introverted person. So, I think sometimes for me it would just be OK not feeling an expectation of having to contribute to the conversation when naturally

> that's not something that I always want to do… I think [my uncomfortable feelings] go back to…. *[shrugs]*. I don't know. It's like, I read a book when I was really younger. It was about this guy in New York, like in the forties to sixties timeframe and what they would do - they were really young and a bunch of kids - and they would look around for tourists and just trick them and scam them and do whatever to them. So, ever since then, I would be uncomfortable anywhere I'd go to be a tourist or look like a tourist.

Henry expressed his apprehension about being deceived or scammed by others in unfamiliar surroundings, leading to discomfort in foreign environments or appearing like a tourist. This contradicted his earlier expressed interest in exploring diverse cultural viewpoints and his relocation to Holland, indicating a wavering commitment to embracing international experiences.

Overall, Henry's narrative oscillated between moments of openness to L2 encounters and self-protective tendencies akin to effort withdrawal and reduction. This ambiguity made it challenging to interpret his remarks, ultimately undermining any observed progress in his L2 possible self development or motivational intensity. In Henry's case, his insufficient competency beliefs, his history of negative French classroom experiences, and the perception of French mainly as a degree requirement, may have prevented the hypothesized effect of the pedagogical intervention. In Henry's case, the treatment failed to activate and elaborate his L2 self-schema, obstructing the development of a more intrinsic motivational approach to language learning.

3.6 Brief Summary

In summary, the findings from the pilot study indicate that the interventionist exercises were successful in promoting the development of students' L2 possible selves. The interview data additionally revealed that the exercises raised students' L2 confidence levels, and boosted integrative motivation, particularly among students already having this motivational orientation. Achieving gains in motivational intensity proved more elusive and was not evident in the

numerical data. For some students, L2 possible self development and motivational intensity were impeded by a range of psychological factors such as life stressors and self-handicapping defenses, as well as environmental factors brought on by the Covid-19 pandemic, such as social isolation and the lack of peer influence due to campus closures. These interferences generally resulted in diminished perceptions of L2 possible self plausibility, L2 self-efficacy, and perceived control over the learning environment and outcomes.

4 Main Study Research Project

4.1 Main Study Focus & Research Questions

The purpose of this research project is to articulate and measure the effect of a pedagogical intervention to enhance L2 possible selves (L2 referring to second and/or foreign language) in university students. This intervention uses task-imagery assignments that allow students to explore and develop prominent and vivid mental representations (self-schemas) of their possible L2 selves. The desired aim of this intervention is to help activate students' social cognitive repository in order to elaborate this part of their self-schema and thereby increase their desire and effort to learn a foreign language.

The research hypotheses guiding this study are:

Research hypothesis 1 (RH1): Ample research has confirmed a robust association between the application of interventionist strategies targeting possible self development and heightened development of those possible selves. I hypothesize that this link will be replicated in the context of foreign language learning. By implementing a pedagogical intervention focused on enhancing the second language (L2) possible self, I hypothesize that the scores reflecting L2 possible self development will be greater in the treatment group as opposed to the control group. Moreover, I predict that the scores within the treatment group will be higher at the end of the quarter, post-intervention, than at the beginning.

Research hypothesis 2 (RH2): If L2 motivation can be defined as a function of a learner's vision of their future possible self, then it follows that learners who undergo task-guided imagery designed to promote imagined encounters with their L2 possible self, may experience increased L2 possible self development and thereby increased motivation to learn the L2. I hypothesize a

significant link ($p < .05$) between learners undergoing the L2 possible self intervention and increased desire and effort to learn the L2 (motivational intensity).

Research hypothesis 3 (RH3): Research supports the idea that learners having a robust possible self within a specific domain have stronger self-efficacy beliefs within that domain (Dornyei, 2009; Hoyle & Sherill, 2006; Reeve, 2018). If imagining ourselves performing successfully provides the conceptual knowledge that promotes feelings of self-efficacy, then I hypothesize that learners undergoing the L2 possible self intervention will report a significant increase ($p < .05$) in perceived confidence in their L2 abilities at the end of treatment.

4.2 Main Study Methodology

4.2.1 Research Design

A randomized controlled experimental design was used for this study where data collection could take place in three separate phases during the quarter. The strength of this method lies in its ability to provide further in-depth explanation and clarification to quantitative data, and in some cases, to bring to the surface information that had not been previously identified (Creswell & Clark, 2018). In combining both quantitative and qualitative data sets, I hoped to be able to highlight the real-world implications of this research. The straightforward approach of this method was particularly advantageous for me as I could collect and process the data in separate phases. This prevented any undue burden on the instructors teaching the courses, sparing them from additional workload associated with this research project.

Data were obtained from full or part-time enrolled students at a large institution in the Pacific Northwest. I aimed to eradicate any potential biases in this project by opting for a blind study where participants were not made aware of the study's purpose. This was due to the

researcher-subject proximity issue and the notably elevated results for L2 possible self development observed in the pilot study, which was not a blind study.

4.2.2 Participants and Group Organization

Following a presentation of the study's overview and objectives to the pedagogical director of the French Department, I obtained permission to conduct the study with students enrolled in first- and second-year language classes in this same department under specific conditions. These conditions included: (i) obtaining approval from each respective course instructor, (ii) agreeing that study-related assignments would account for only 1% of the course grade, a deviation from my initial request of 5%, and (iii) stipulating that all tasks and interventions associated with the study would be designated as homework and completed by students outside of regular class hours.

The study involved 123 university students who were enrolled in either a first or second-year French language course during the fall quarter of 2022. Specifically, the classes were two first-quarter French classes (level 101), two third-quarter French classes (level 103), and two fourth-quarter French classes (level 201), and involved five separate instructors. In order to account for potential differences in instructional and curricular abilities among these cohorts, treatment and non-treatment groups were established within each class.

At the beginning of the academic quarter, students completed an initial survey, which served to establish a baseline of the variables being measured. At the same time, additional student data was collected, allowing for the stratification of students based on gender (male, female, and non-binary) and their prior exposure to the L2 (yes/no). This categorization was carried out with the aim of ensuring an equitable distribution of gender and prior L2 exposure characteristics within both treatment and control groups (Creswell & Clark, 2018).

4.2.3 Instrumentation & Measures

4.2.3.1 Quantitative Instrumentation and Measures

The three elements under examination—L2 Possible Self, Motivational Intensity, and Perceived Competence—are intricate and multifaceted psychological constructs, typically necessitating a comprehensive survey that measures each variable from multiple approaches and instances. However, practical limitations led to the need for a concise survey.

Rather than narrowing the study's scope, I opted to limit the number of items for each variable being assessed. This decision aimed to facilitate the study's administration across as many classes as possible by minimizing the time participants needed to allocate to research-related activities, thus allowing them to focus on their regular course material. To ensure the survey maintained its psychometric quality, the questions were adapted from instruments with established reliability and validity coefficients for the three variables being tested (MacIntyre, McKinnen, and Clément, 2009; Gardner, 2004; Schwarzer, 2014). To assess the internal reliability of the three elements under investigation on this sample of students, I calculated Cronbach's alpha for each variable which showed that all items had high internal consistency: L2 Possible Self at .90; Motivational Intensity at .70; and Perceived Competence at .84.

4.2.3.1.1 L2 Possible Self

The concept of a possible self pertains to a psychological construct wherein individuals envision and contemplate various potential versions or facets of their future selves. It encompasses the diverse identities, roles, and accomplishments that a person may aspire to or envision as part of their future life, covering personal, professional, social, and other life dimensions (Markus & Nurius, 1986). As a central aim of this study is to evaluate the evolution of L2 possible self over

time, I incorporated 15 items from an established survey developed by MacIntyre, McKinnen, and Clément (2009) to achieve this measure.

4.2.3.1.2 Motivational Intensity

An important aim of the pedagogical intervention in this study is to kindle students' motivational intensity, encouraging them to sustain dedication and effort in the learning process. Motivational intensity is characterized as the strength and determination that an individual applies towards accomplishing a goal or objective (Gardner, 2004). To assess changes in student motivational intensity with respect to their commitment to learn French, I integrated 10 items from Gardner's Attitude Motivation Test Battery (AMTB) (originally published in 1985, and updated in 2004). The instrumentation used here differed from the pilot study in two ways. Firstly, I adapted the wording on some questions to be clearer based on previous student feedback; and secondly, I took 10 items from the AMTB instead of five in order to obtain a more thorough measure.

4.2.3.1.3 Perceived Competency / Self-Efficacy

Self-efficacy refers to one's belief in their capacity to effectively perform and achieve specific actions or tasks, leading to desired outcomes (Bandura, 1997). It constitutes a crucial element in motivation and performance, influencing the goals we set and why we pursue them. Importantly, self-efficacy is not a fixed trait; it can be cultivated and altered over time.

To construct this measurement, I selected eight items drawn from Mosier's research on academic self-efficacy (2018). Her measurements were built upon Schwarzer and Jerusalem's Self-Efficacy Scales (1985), which have been employed in over 1,000 studies across 33 languages (Schwarzer, 2014). I adapted these items to make them contextually specific to French language learning and performance.

The final version of the instrument comprised 33 items (please see Appendix D) examining the variables of L2 Possible Self, Motivational Intensity, and Perceived Competence. Participants provided responses using a 7-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree), with a neutral option at 4 (neither disagree nor agree). Completing the survey typically required approximately 7-12 minutes.

The initial segment of the survey included a concise introduction, which conveyed the purpose of the short survey as "helping researchers understand how learning a language affects how students feel about themselves." It was emphasized that the survey was to be completed for homework credit, and measures would be taken to ensure the confidentiality of participants' information and responses. In addition, my contact information was provided for any students with questions related to the survey or possible self assignments.

The beginning of the survey involved the collection of certain demographic information, specifically: name, age, gender, and details regarding the languages they spoke or had prior experience with. Notably, no discussions or explanations concerning possible selves, motivation, or competency feelings were included, thereby maintaining that students were unaware of the specific constructs being assessed. The second section of the questionnaire featured the 33 items, which were in randomized order. The same survey instrument was employed for both the pre- and post-testing phases to enable a comparison of the obtained variables.

4.2.3.2 Qualitative Instrumentation

An inherent constraint when using surveys to investigate constructs linked to L2 possible selves is that the operationalization of these explored constructs is confined to the researcher's imaginative scope in designing the survey. To examine whether the constructs presented in the present study's survey align with students' actual perceptions of their envisioned L2 possible

selves, and the relevancy of such self-schemas, I needed to examine the individual learners in context. The richness of qualitative data facilitates the exploration of the dynamic and complex interactions between social, cultural, and psychological elements pertinent to each individual learner.

The number of participants in this study precluded the possibility of conducting in-depth qualitative interviewing; therefore, the decision was made to acquire qualitative data in the form of written reflections which students would submit after each task-guided imagery assignment.

Students were instructed to reflect on their visualizations and respond to specific, yet open-ended questions aimed at eliciting detailed descriptions of the mental images they had encountered. They were also prompted to share any thoughts and emotions experienced during or immediately after the exercise and to relate this experience to their current French learning context. Students were encouraged to explore broader aspects of their educational and personal lives relevant to the questions. To guide the qualitative investigation, a set of probing questions was employed, tailored to the specific task-guided imagery being presented, such as:

- How do you feel about the interaction you had in French in this scenario?
- Were you able to evoke an image of yourself interacting in French? Who is the French you? Describe the French you in detail, both your inward feelings and how you look. Do you have a different hairstyle? clothing style? temperament?
- How is the French you different from the you of today? What actions are you taking/would you like to take/do you plan to take towards becoming the French you?
- As you walked away from the scene, how did you feel? What was having an impromptu conversation in French like for you? How was your French in this scenario? Did you feel confident? Why or why not, do you think?

- Did anything feel difficult about this scenario? Was any part harder to imagine than another? If so, what was the difficult part?
- What do you tell your friend about your life in France? How long have you been living here? What do you like about it? What do you miss about your home country?
- How do you feel about being able to take care of your friend by speaking French for them? Why do you think you feel this way?
- Does this scenario seem like a plausible one for you? Why or why not?

In following the desire to maintain a blind study, there was no mention of terminology such as possible selves, motivation, or perceived competence in the task-guided imagery prompts. The main concepts explored through the written reflections were:

- student perceptions of their ability in the L2 and how it made them feel (related to perceived competence),
- what, if any, future French self they imagined or felt they could become (related to their L2 possible self development)
- their perception of the gap between their current self and their future L2 self and how they felt they might close this gap (related to plausibility of the L2 possible self and their motivation towards closing the gap)

Having students write their reflection pieces offered several advantages. To begin with, articulating their envisioned outcomes in detail may have helped heighten awareness of their L2 self within their working self-concept and facilitate the consolidation of their feelings regarding its evolution (Russ, 2004). This process mirrors the cognitive and affective engagement experienced during creative play in children, fostering divergent thinking and cognitive insight, while also enabling the direct experience of feeling any corresponding emotions as they unfold in

the writing process (Russ, 2009). Furthermore, writing down goals can increase motivation and persistence by bringing them into focused awareness and facilitating the defining of actionable steps needed towards their achievement (Duckworth, 2010). It was my hope that students would benefit from some of these cognitive and affective advantages by having them articulate their nascent L2 self-schema through writing.

4.2.3.3 Demographics of the Sample

At the outset, 123 university students who were enrolled in French courses were part of the study. However, 54 students were excluded from the quantitative dataset as they did not complete both the pre- and post-intervention surveys or failed to finish at least three of the four possible self exercises. Concerning the qualitative dataset, 12 students from the treatment group were excluded for not having completed three of the four possible self exercises. It is worth noting that the completion rate may have been influenced by the fact that all research assignments carried a weight of only 1% in the final grade, potentially affecting students' motivation to complete them. Consequently, the final pool of participants was as follows: for the quantitative dataset - 45 women and 24 men, for the qualitative dataset – 35 women and 15 men. These participants were aged between 17 and 34 years old (M_{age} = 20.40, SD_{age} = 2.9)

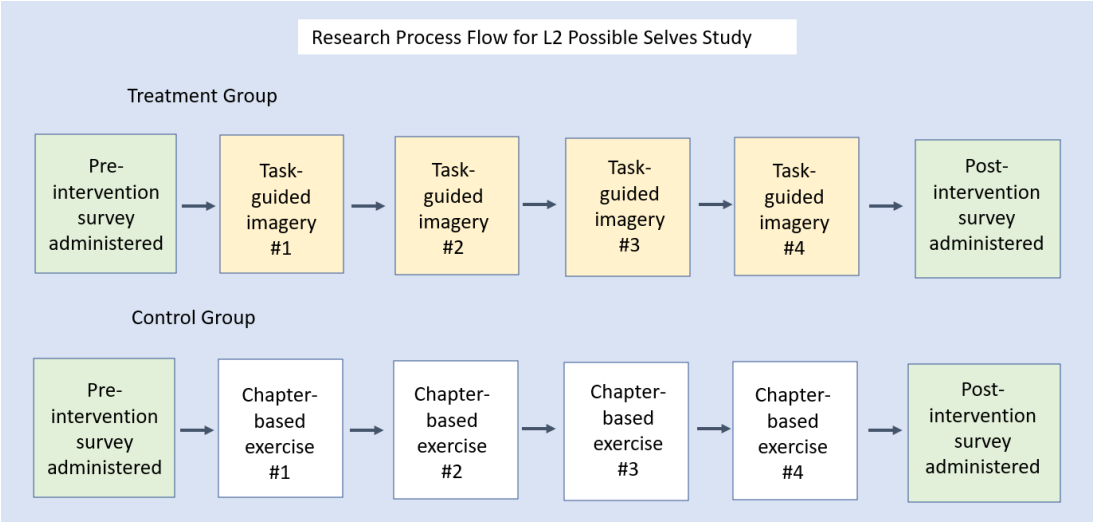
4.2.4 Data Collection & Analysis

4.2.4.1 The Intervention Process Flow

Throughout the ten-week course, participants in the treatment group received a total of four task-guided imagery exercises designed to foster the development of their L2 possible selves. These intervention activities were distributed at two-week intervals through the online learning platform used for homework assignments in the course. Concurrently, the control group received

a set of four exercises delivered through the same medium. However, the control exercises were not formulated to influence the L2 possible self; instead, students were tasked with writing brief reflections on their current or past experiences (e.g., their favorite holiday or a cultural tradition within their family). Both groups' exercises were assigned as homework, with full credit awarded for any completed submissions. The task-guided imagery exercises were labeled as "cultural

Table 8 Main Study Research Process Flow



exercises" on the Canvas online platform for both the treatment and control groups. Students were advised that different cultural exercises would be assigned to different individuals at different intervals to elicit a wide range of responses. This approach aimed to prevent any alarm or confusion among students if they discussed the "cultural exercises" together and realized they had been assigned different activities. There were no in-class sharing activities or instructor-led discussions pertaining to these exercises.

Subsequently, each student received encouraging written feedback from the researcher on their submissions whether in the treatment or control group. All students were administered the survey again during the last week of the quarter.

4.2.4.2 Quantitative Data Collection

The pre-intervention survey was accessible during the initial three weeks of the quarter and subsequently closed. Activity assignments remained open throughout the quarter, allowing students to complete them at their convenience, with a designated due date. While assignments submitted after the due date were marked as 'late,' no points were deducted if they were successfully completed and submitted. This was done to encourage student participation in the activities.

The post-intervention survey became available during the final two weeks of the quarter, with a requirement for completion before the final exam. As the quarter ended, all survey data, homework submissions, including the qualitative written reflections, were retrieved from Canvas, and securely stored on a server.

4.2.4.3 Qualitative Data Collection

At the onset of the academic quarter, I had the opportunity to meet half of the participants upon the request of their instructors. I introduced myself as the research assistant responsible for grading the "cultural exercises" assigned as homework. The remaining half of the students were acquainted with my name from my role as the research assistant on the "cultural" project, but never met me in person.

Throughout the study, all students were tasked with completing four written reflections spaced approximately two weeks apart. Upon submission of each reflection, I reviewed the content they had provided and offered positive and encouraging feedback in writing via the Canvas online system. The purpose of this feedback was to affirm the ongoing development of their L2 possible selves (Kubanyiova, 2015) and address any perceived challenges they may have encountered

(Wilson & Linville, 1985, 1982). Students received a full-credit score for diligently completing the exercises regardless of the length of the written reflections and/or its content.

Approximately two hundred and thirteen written reflections were collected from students in the treatment group. These reflections were retrieved from the Canvas learning platform and securely stored on a server, organized by course level.

4.2.4.4 Quantitative Data Validation & Analysis

The quantitative data was computer-coded using Microsoft Excel, and assessed for internal consistency reliability; Cronbach's alpha was applied to all survey data, with results surpassing the recommended threshold of 0.60 (Dornyei, 2007). Negatively worded items were recoded positively, and individual item means for each variable were substituted for missing data to preserve the overall data integrity. Correlation matrices were performed and their respective *p*-values calculated to determine strength of associations among the three items being measured (Possible Selves, Motivational Intensity, and Perceived Competence).

To streamline the survey data, composite multi-item scales were generated for each variable by summing the responses across each French class, encompassing both pre- and post-intervention data for both treatment and control groups. Descriptive statistics for each class were calculated both before and after the intervention, and paired t-tests were run for each variable.

4.2.4.5 Qualitative Data Validation & Analysis

A content analysis approach was selected for analyzing the written reflections. The primary analytical step in content analysis involves coding narratives based on emerging themes, trends, patterns, or conceptual categories (Bernard, Wutich & Ryan, 2017). This structured approach proved advantageous when handling substantial amounts of textual data, enabling the identification of prevalent themes, and providing contextual insights into their meanings.

Moreover, it facilitated the exploration of thematic discrepancies among the three language class levels.

I began by categorizing quotes from the written reflections into manageable segments by aligning them with the primary themes under investigation as suggested by Dornyei (2007) and Bernard, Wutich & Ryan (2017) using MS Excel. These themes were: L2 possible selves, motivational intensity, and perceived competency beliefs. I was specifically interested in passages where students had: depicted their current selves or L2 selves, recounted situations influencing their motivation to pursue foreign language studies or develop their L2 self, and/or provided insights into their L2 perceived competency beliefs. Any feedback they conveyed on the task-guided imagery activities was also included.

A prominent observation in the quantitative data was the dissonance between the advancement of L2 possible selves and motivational intensity. Given that the qualitative aspect of the study held secondary significance and aimed to provide insight and elucidate the quantitative data findings, I chose to delve into the written reflections again, taking a grounded theory approach to explore any additional themes emerging from the data. My aim was to see if I could uncover the reasons behind the lag in motivational intensity observed in the numerical dataset, and perhaps offer insights to educators for students facing similar contextual circumstances as those examined in this study. Employing Glaser & Strauss's (2017) constant comparative method and theoretical coding, I dissected the data into conceptual elements, contemplating their potential connections to broader themes. Two juxtaposing motifs emerged from this process: (i) L2 possible selves were experienced as calmer and more relaxed compared to students' current selves, and (ii) a considerable number of students reported prohibitive levels of current life stress which hindered their contemplation of their L2 selves. Finally, using a text-by-theme matrix (Bernard, Wutich,

Ryan, 2017), all themes were coded and ultimately classified in terms of the variables under investigation.

To illustrate the relative prominence of each theme within the data, I conducted an analysis of theme frequency in relation to the number of participants, ultimately generating a percentage representing the proportion of respondents that had expressed a respective theme by their total number. My objective was not to transform these narratives into quantitative data sets per se, but rather to offer a snapshot to the reader of the prevalence of these themes across the three variables. In doing so, I sought to offer a concise yet meaningful overview of the emerging themes.

4.3 Main Study Findings

4.3.1 Main Study Quantitative Data Findings

The primary objective of this research study was to investigate whether implementing a pedagogical approach centered around task-guided imagery could improve the potential future selves of university students in their second language (L2) learning. Existing research has indicated that enhancing possible selves is linked to increased motivation and perceived competence. This study was designed to explore the interplay among these three factors and to evaluate the impact of the task-guided imagery intervention. Data were gathered through a survey administered before and after the intervention, as well as through reflective written assignments submitted by participants.

4.3.1.1 Aggregate Correlations

To gauge the comparative influence of Motivational Intensity and Perceived Competence, I examined their correlations with respect to the Possible Self measure. The significance of L2 possible self enhancement in this study lies in the extent to which it promotes both (i) the inclination and dedication to learn the language and (ii) the self-efficacy beliefs associated with

this endeavor. As anticipated, positive correlations were observed among all three variables for both the pre- and post-intervention groups, aligning with previous research findings (Dornyei & Csizér, 2002; Leondari & Gonida, 2008; Oyserman, Brickman, & Rhodes, 2007; Oyserman, Terry, & Bybee, 2006; Oyserman, Coon & Kemmelmeier, 2002; Ryan 2009; Taguchi, Magid, & Papi 2009). These correlations are reported in Table 3. Looking closely, however, the results in this study are notable for several reasons.

First and foremost, a single variable stands out for its noteworthy predictive capacity regarding L2 Possible Selves: Perceived Competence, a fundamental component in the formation of self-schemas (Bandura, 2012; Schunk & Pajares, 2002). When contrasted with Motivational Intensity, the measure of Perceived Competence displays a stronger and more significant connection to Possible Selves (please refer to table 9).

In addition to the generally weaker impact of Motivational Intensity on the development of Possible Selves, there is a noticeable decrease (although not statistically significant) in this association within the treatment group, which was unexpected (from .45 to .24). Upon closer examination, this decrease was primarily influenced by responses from one specific class (French 103A) that did not exhibit the hypothesized pattern, but rather the opposite. Speculating on the cause of this outcome would be challenging without post hoc participant interviews. In contrast, the control group for the same class, as well as the treatment and control conditions for the other French classes, yielded more consistent and anticipated results. When excluding the anomalous subset of data, a more regular pattern emerges with a positive correlation value of .39. Nonetheless, the study did reveal a diminished connection between Motivational Intensity and Possible Self development in the treatment group, a finding that is further echoed in the comparative analysis among the three class levels.

4.3.1.2 Between-Group Comparisons

In order to verify whether the treatment and control groups were initially similar and comparable in terms of measured variables, descriptive statistics and t-tests were performed. This helped ensure that any differences observed after the intervention could be more confidently attributed to the intervention itself rather than initial group differences.

Table 9 Main Study Correlation Coefficients

Treatment Group Pre-intervention

	Motivational Intensity	*Perceived Competence*
Possible Selves	0.45*	0.50**
Motivational Intensity		0.76***

Treatment Group Post-intervention

	Motivational Intensity	*Perceived Competence*
Possible Selves	0.24	0.68***
Motivational Intensity		0.43**

Control Group Pre-intervention

	Motivational Intensity	*Perceived Competence*
Possible Selves	0.40*	0.59**
Motivational Intensity		0.39*

Control Group Post-Intervention

	Motivational Intensity	*Perceived Competence*
Possible Selves	0.54**	0.74***
Motivational Intensity		0.51**

* $p < .05$; ** $p < .01$; *** $p < .001$

The calculations for all three measured variables indicated that both the treatment and control groups were similar in the pre-intervention condition, with no significant difference between their means (refer to tables 15-17).

Table 10 Possible Self Between Groups Comparison

	Between Groups Comparison					
Possible Self	Sample	*M*	*SD*	*t*- value	Effect size[1]	PS[2]
Pre-Intervention						
Control	*n* = 35	5.3	1.0			
Treatment	*n* = 34	5.4	0.9	0.439	0.105	52%
Post-Intervention						
Control	*n* = 35	5.4	0.9			
Treatment	*n* = 34	5.7	0.7	1.422	0.342	61%

*p <.05; ** p <.01; *** p <.001

[1]Cohen's *d* for unequal sample sizes

[2] Probability of Superiority based on Effect Size (Grissom, 1994)

Reviewing the post-intervention data sets for Possible Selves, an elevation in the between-group means is observed for the treatment group (5.7) compared to the control group (5.4); yet this increase does not reach statistical significance, likely due to the constrained sample size. However, calculating percent change differences on the probability of superiority (PS) measures offer a clearer understanding of the post-intervention impact, revealing that students in the treatment condition were 18% more likely to achieve higher scores in L2 possible development than those in the control group. These same calculations also reveal that students in the treatment condition were also 16% more likely to attain higher scores in L2 Motivational Intensity and L2 Perceived Competence than their counterparts in the control group.

4.3.1.3 Findings by Research Hypothesis: Within-Group Comparisons

To address the hypotheses guiding this study, I conducted descriptive statistical analyses to establish the mean and standard deviation values. Furthermore, paired sample t-tests were

performed to ascertain statistical significance, gauge effect sizes, and estimate the likelihood of superiority. Let us now delve into the observed changes that transpired before and after the intervention for both control and treatment groups across the three class levels, organized according to the research questions.

Research hypothesis 1 (RH1): Ample research has confirmed a robust association between the application of interventionist strategies targeting possible self development and heightened development of those possible selves. I hypothesize that this link will be replicated in the context of foreign language learning. By implementing a pedagogical intervention focused on enhancing the second language (L2) possible self, I hypothesize that the scores reflecting L2 possible self development will be greater in the treatment group as opposed to the control group. Moreover, I predict that the scores within the treatment group will be higher at the end of the quarter post-intervention than at the beginning.

Table 11 Motivational Intensity Between Groups Comparison

	Between Groups Comparison					
Motivational Intensity	Sample	*M*	*SD*	*t*- value	Effect size[1]	PS[2]
Pre-Intervention						
Control	*n* = 35	5.5	0.8			
Treatment	*n* = 34	5.5	0.7	0.008	0.002	50%
Post-Intervention						
Control	*n* = 35	5.3	0.8			
Treatment	*n* = 34	5.5	0.7	1.028	0.247	58%

*p <.05; ** p <.01; *** p <.001

[1]Cohen's *d* for unequal sample sizes

[2] Probability of Superiority based on Effect Size (Grissom, 1994)

Table 12 Perceived Competence Between Groups Comparison

	Between Groups Comparison					
Perceived Competence	Sample	*M*	*SD*	*t*- value	Effect size[1]	PS[2]
Pre-Intervention						
Control	*n* = 35	5.2	0.9			
Treatment	*n* = 34	5.3	1.0	0.139	0.033	50%
Post-Intervention						
Control	*n* = 35	5.4	0.9			
Treatment	*n* = 34	5.7	0.8	1.066	0.257	58%

*p <.05; ** p <.01; *** p <.001

[1]Cohen's *d* for unequal sample sizes

[2] Probability of Superiority based on Effect Size (Grissom, 1994)

I had anticipated and observed increases in Possible Self measures for both the treatment and control groups. The improvement noted in the control group, while not statistically significant, can be attributed to the increased intensity and exposure to the L2, leading to a natural augmentation in self-schema activation within this context (Ditta et al., 2020; Fletcher et al., 2001; Mezirow, 2000; Yu et al., 2020). However, when I compare the Possible Self measures of the treatment group to those of the control group, a notable and statistically significant growth becomes evident. Specifically, in the French 101 class, I observed an increase from an initial mean of 4.9, SD = 0.8 to a final mean of 5.3, SD = .6; t (11) = -3.040, p < .001. The pronounced enhancement in Possible Selves among the participants in the treatment condition provides strong support for the first hypothesis and affirms that the intervention had a positive and substantial impact within the treatment condition (please refer to table 12 below).

Table 13 Possible Self Within-Group Comparison

	Treatment						Control					
Possible Self Measure	Sample	*M*	*SD*	*t*- value	Effect size[1]	PS[2]	Sample	*M*	*SD*	*t*- value	Effect size[1]	PS[2]
French 101	*n* = 10						*n* = 12					
Preintervention		4.9	0.8					5.3	0.8			
Postintervention		5.3	0.6	-3.040**	0.96	76%		5.4	0.8	-0.755	0.22	57%
French 103	*n* = 11						*n* = 12					
Preintervention		5.3	0.9					4.7	1.1			
Postintervention		5.6	0.8	-2.560*	0.77	71%		5.0	0.9	-2.004	0.58	66%
French 201	*n* = 13						*n* = 11					
Preintervention		5.9	0.7					5.9	0.8			
Postintervention		6.1	0.5	-2.528*	0.70	69%		5.8	0.7	1.489	0.45	61%

*p <.05; ** p <.01; *** p <.001

[1]Cohen's d for paired samples

[2] Probability of Superiority based on Effect Size (Grissom, 1994)

Research hypothesis 2 (RH2): If L2 motivation can be defined as a function of a learner's vision of their future possible self, then it follows that learners who undergo task-guided imagery designed to promote imagined encounters with their L2 possible self, may experience increased L2 possible self development and thereby increased motivation to learn the L2. I hypothesize a significant link ($p < .05$) between learners undergoing the L2 possible self intervention and increased desire and effort to learn the L2 (motivational intensity).

Contrary to expectations, most of the changes observed in Motivational Intensity did not reach statistical significance. It is remarkable that students across the board reported a decrease in motivation within the control group, with one course (French 201) experiencing a noteworthy decline (please refer to table 14). Conversely, two out of the three treatment groups reported heightened motivational sentiments and one course reported a decrease. These findings suggest that the L2 possible self intervention, while not leading to a substantial enhancement in student motivational intensity, may have played a role in mitigating or preventing a decline in motivational

intensity among students in the treatment condition. Overall, the increase in the development of possible selves within the treatment group did not align with the second research hypothesis of a concurrent increase in student motivational intensity.

Research hypothesis 3 (RH3): Research supports the idea that learners having a robust possible self within a specific domain have stronger self-efficacy beliefs within that domain (Dornyei, 2009; Hoyle & Sherill, 2006; Reeve, 2018). If imagining ourselves performing successfully provides the conceptual knowledge that promotes feelings of self-efficacy, then I hypothesize that learners undergoing the L2 possible self intervention will report a significant increase ($p < .05$) in perceived confidence in their L2 abilities at the end of treatment.

Table 14 Motivational Intensity Within-Group Comparison

	Treatment						Control					
Motivational Intensity	Sample	*M*	*SD*	*t-value*	Effect size[1]	PS[2]	Sample	*M*	*SD*	*t-value*	Effect size[1]	PS[2]
French 101	*n* = 10						*n* = 12					
Preintervention		5.6	1.0					5.7	0.6			
Postintervention		5.8	0.9	-2.029	0.64	69%		5.4	0.9	2.099	0.61	66%
French 103	*n* = 11						*n* = 12					
Preintervention		5.1	0.6					5.1	1.0			
Postintervention		5.2	0.7	-0.629	0.18	55%		5.1	0.8	0.463	0.13	53%
French 201	*n* = 13						*n* = 11					
Preintervention		5.6	0.5					5.5	0.7			
Postintervention		5.4	0.7	1.301	0.36	61%		5.3	0.7	3.259*	0.98	76%

*p <.05; ** p <.01; *** p <.001

[1] Cohen's d for paired samples

[2] Probability of Superiority based on Effect Size (Grissom, 1994)

Participants in both the treatment and control groups experienced enhancements in their L2 Perceived Competence throughout the 10-week course. However, it is noteworthy that participants in the treatment group reported statistically significant improvements ($p < .05$), while

the control group did not exhibit the same level of change (please refer to table 15). When analyzed by class level, two out of three classes in the treatment group showed significant improvements in perceived competence. When all three classes are combined, the statistical significance remains. This discovery lends substantial support to the third research hypothesis and corroborates prior research findings that establish a strong connection between well-formed possible selves and heightened self-efficacy beliefs (Dornyei, 2009; Hoyle & Sherill, 2006; Reeve, 2018).

Table 15 Perceived Competence Within-Group Comparison

	Treatment						Control					
Perceived Competence	Sample	*M*	*SD*	*t-value*	Effect size[1]	PS[2]	Sample	*M*	*SD*	*t-value*	Effect size[1]	PS[2]
French 101	*n* = 10						*n* = 12					
Preintervention		5.2	1.0					5.1	0.8			
Postintervention		5.4	0.7	-1.382	0.44	61%		5.4	0.9	-1.940	0.57	66%
French 103	*n* = 11						*n* = 12					
Preintervention		4.8	1.1					5.1	0.7			
Postintervention		5.5	0.9	-2.377*	0.72	69%		5.2	0.8	-0.702	0.20	56%
French 201	*n* = 13						*n* = 11					
Preintervention		5.8	0.8					5.5	1.1			
Postintervention		6.0	0.6	-2.405*	0.67	68%		5.7	0.9	-0.582	0.18	55%

*p <.05; ** p <.01; *** p <.001

[1]Cohen's d for paired samples

[2] Probability of Superiority based on Effect Size (Grissom, 1994)

4.3.1.4 Practical Significance: Cohen's d and Probability of Superiority

To assess the practical or theoretical significance of this intervention, I computed Cohen's *d* for paired samples effect sizes to gauge the extent of the observed changes after the treatment. This additional data enables researchers to combine statistical significance with a description of the magnitude of observed effects, which is not influenced by sample size variations (Fritz et al., 2012).

Typically, Cohen's *d* effect sizes are interpreted as small (*d* = 0.2), medium (*d* = 0.5), and large (*d* = 0.8). However, I find this scale somewhat abstract and lacking in practical interpretation. Therefore, I have chosen to incorporate Grissom's (1994) probability of superiority (PS) percentage, which is derived from the Cohen's *d* effect size value. When comparing two related sets of data, the PS value indicates the percentage of instances in which "a randomly selected member of the distribution with the higher mean will have a higher score than a randomly selected member of the other distribution" (Fritz et al., 2012, pp. 14).

For example, looking at table 13, we see the French 101 treatment group for Possible Self had a *d* of .96 which renders a PS of 76%. This implies that if you compared randomly selected individuals from the pre- and post-treatment groups, the post-treatment individuals would have a higher possible self score than the pre-treatment individuals 76% of the time. Thus, we can conclude that the intervention was not only statistically powerful, but also had a large effect on this group based on the magnitude of observed effects.

Analyzing the Probability of Superiority (PS) percent changes for the Possible Self measure in table 13, we observe that the French 101 treatment group had a higher possible self score than the control group 25% more frequently. This trend also held for French 103, with a 7% higher frequency, and for French 201, which showed a 12% higher frequency. Based on this data, it is evident that the Possible Self intervention had the most substantial impact on the treatment group in general, and first-semester French students, specifically.

In contrast, the percent change impact was less pronounced for Motivational Intensity, with the French 101 and French 103 courses experiencing an average increase in Motivation over the control group 4% more often. While motivational scores decreased in both the treatment and control groups for the French 201 course, the decline was more significant in the control group,

where scores decreased 20% more frequently compared to the treatment group. Again, these figures suggest that the intervention may have assisted in mitigating a more pronounced decline in motivation in the treatment condition for the French 201 course.

As for Perceived Competency measures, they increased in all courses, both in the treatment and control conditions. However, PS values indicate a more substantial effect magnitude in two of the treatment groups (French 103 and French 201), with competency beliefs increasing 20% more often. This combined with the statistical significance of the treatment group measures point towards the effectiveness of this pedagogical intervention in increasing student competency beliefs.

To summarize, when analyzing effect size calculations, it becomes evident that the treatment condition had a substantial impact, ranging from moderately strong to strong, on the growth of possible self and perceived competence. In contrast, the effect size implications are less pronounced for Motivational Intensity, indicating only a generally moderate influence on both groups.

4.3.2 Main Study Qualitative Data Findings

This section systematically explores the findings organized by each of the three variables under investigation (L2 self development, motivational intensity, and perceived competence). Each theme is exemplified by quotations from the student-written reflections, sourced from students within the treatment group.

4.3.2.1 L2 Possible Selves

In the written reflections, students were asked to contrast their current self with their envisioned French self through a detailed account of the distinctions. The purpose behind this request was twofold. Firstly, it encouraged them to create a more prominent and vivid mental

representation of their French self by actively articulating this self-schema. Secondly, it encouraged them to contemplate the existing gap between their current identity and their French self. The strength and vividness of their L2 self descriptions were apparent in these reflections, correlating with the heightened L2 possible self measures observed in the quantitative dataset.

Below are the L2 Possible Self themes which emerged from the data, complemented by quotes from students relevant to each theme.

Table 16 Main Study Qualitative Themes - L2 Possible Self

L2 Possible Self						
How my French self is different from me now	more relaxed, confident, & happy	more culturally savvy & able to blend in	more independent, self-possessed, brave, and determined	better looking & more fashionable	the same as I am now, no difference	too difficult for me to evoke
French 101 *n* = 17	51%	27%	33%	33%	6%	12%
French 103 *n* = 14	90%	56%	48%	42%	7%	7%
French 201 *n* = 19	79%	53%	50%	42%	5%	0%
Average	**73%**	**45%**	**44%**	**39%**	**6%**	**6%**

4.3.2.1.1 French self is more relaxed

An unexpected discovery was that 73% of participants depicted their French self as embodying a more relaxed, cheerful, and self-assured individual compared to who they feel themselves to be today:

- Mostly I notice in my imagined version of "French me," there is a relaxed sense of confidence that current me doesn't always possess, though I look physically the same. I am often too nervous to try out my French with the French speakers I encounter semi-regularly at my work; but this version of me is comfortable enough to respond to

something unexpected in the moment, in order to connect with someone else and is less self-conscious (S25, 103A).

- This French me, like many other imaginations, represents the ideal self who has no insecurities to worry about. He has a confident posture, practices skills or hobbies daily, and reads many books a month (…) If anything, he is even more relaxed and does not let typical frustrations get to him. (S50, 101B).
- I think I would be more at ease; the European lifestyle embraces the slowness of life and I think Americans could learn a thing or two from it. More confident and allows herself to enjoy the little things in life (S10, 101B).
- My hair is longer here, it feels healthier. I feel content here. I am calm and it feels like a piece of me has finally been fulfilled. I feel comfortable and beautiful, and everything seems romanticized. French me seems less anxious. Maybe because she doesn't have the pressure to hustle like she does in America (S30, 101B).
- I would be from a suburb in Paris, leaning into the creative side that had shriveled up for the competitor the American counterpart took…Escaping the hustle and bustle of city life made him much more of a wandering spirit. He would have a much more go with the flow kind of personality. Very laid back as the process was more valued than results in his childhood (S6, 101E).
- I can speak the language fluently, I think I am calmer and less stressed about work, etc. and able to enjoy the little things more (S33, 201A).
- French me wears linen and has fewer worries. In French, the things that demand my attention are more up to me to decide, as opposed to my English reality in which many demands are placed on me and my time. I think that freedom, that unhurriedness, shapes

my mental image of the French me, so I am someone who doesn't fret about dressing in the morning, or packing enough food to make it through the day, or if I'll have a greasy forehead during my discussion section (S8, 201A).

- The French me appears to be more confident and relaxed. Likely the cooler version of American me. My temperament is calm (S15, 201B).
- She lives in the present, enjoys the moment walking on the street and coffee time in the café (S3, 103A).
- I think the French me is just more carefree (…) I think she would be able to read more and go on more adventures, basically live out her dreams! (S12, 201B).

4.3.2.1.2 French self is more culturally savvy, independent, and confident

A prominent characteristic reported by students was that their French selves were more culturally savvy and able to act in French contexts without depending on the help of others (44%). In tandem, these increased feelings of independence rendered them more autonomous and self-possessed than who they are today (45%). Several students mentioned that their sense of self-assurance stemmed from their imagined enhanced French speaking skills, while others described a broader, more general sense of self-possession, maturity, and composure. Students were more likely to report these attributes together, and after imagining scenarios where they were living, working, or studying in a francophone country:

- The French me is more confident and older, I think, and more sure of himself (S17, 201B).
- The French version of myself is slightly older, as well as being more mature and independent. [He] is different from the me of today. He is roughly three years older,

being out of college and having a full-time job. He is also living by himself and is very wealthy and dresses well. He resembles more of a possible future for me (S46, 101E).

- She is an independent girl, who knows what she wants, never gives up, and never stops improving. She will be more mature and confident than I am (…) She will no longer be afraid to talk in public (S3, 103E).
- Being at a [Parisian] restaurant with a friend and speaking French made me feel independent (S47, 103B).
- This feels very powerful and I feel like a very independent girl boss. (S34, 201A).
- (…) that version of me would be confident in speaking French and knowing my way around culturally. More confident and allows herself to enjoy the little things in life (S10, 101B).
- French me would not need to think about what to say or how to say it. I would like to think I'd have a better cultural understanding too, since that's important while talking to people (S48, 101B).
- I tend to get quite absorbed in new places. I probably just feel normal; maybe somewhat reaffirmed, like I fit in (S22, 201A).
- In this interaction I felt determined. I felt on top of the world and it felt easy like I didn't have to think about what I was saying it just flowed out of me. The French me is very carefree, happy, confident and determined. I look about the same as I do now yet I feel almost less immature than I was before. It's like knowing French made me more proper. The French me doesn't have to stress on learning French because I already know it! The French me is also way more confident. Knowing another language is so cool and it would make me feel even cooler (S49, 103B).

- I have something to show for my careful attention to the language and culture, and feel a kind of deep satisfaction in being able to navigate the [restaurant] menu while my friend can't. I feel strangely like a cultural ambassador for a culture that isn't my own, which is an odd but gratifying feeling (S4, 201A).
- [My French self] is an independent girl, who knows what she wants, never gives up, and never stops improving. She will be more mature and confident than I am (…) She speaks fluent French and English. She will no longer be afraid to talk in public (S3, 103A).
- The French me shares the same base, but is like the next step compared to the me of today. In many ways there are few deviations between us, but the differences stack up into someone who fills their own shoes better than I do now. I have always wanted to fly with my own wings (S50, 101B).

4.3.2.1.3 French self is more fashionable and better looking

Building upon feelings of cultural and linguistic confidence is the fascinating revelation that students envisioned their French selves as more visually appealing and having an elevated sense of fashion that their current selves. In contrast to the 6% of learners who noted no disparity between their current self and their French self, 39% of learners described their French self as "better looking," "more fashionable," or showing a greater concern for style:

- For some reason I envisioned my clothes to be those of a more chic, timeless style, than they fully are today (S22, 201A).
- I look more put together in a fashionable French outfit (S33, 201A).

- I’d like to have a more French clothing style if I were to live in France. My idea of French men's style is button downs, turtlenecks, dress pants, and a peacoat if it's cold. Maybe my hair slicked back (S17, 201B).
- I would have a different hairstyle and clothing style influenced by the surrounding culture growing up (S37, 201B).
- For me in France, I think I will dress up fashionably and layer various designer brands (S24, 201B).
- French me would have super cool clothes, with lots of colors and fun patterns. I would wear long skirts and have short hair. I would want to reinvent myself and create a new life for me in France (S16, 201B).
- This French me (…) has a sense of fashion, with a closet of nice coats, sweaters, and berets. His hairstyle is a fine-tuned version of what I have been doing, with a part on the left and the hair curved onto the right creating a right angle between the hairline and downward hair (S50, 101B).
- If I were to imagine a French version of me it would be drastically different than the me of today (…) I imagine it would be more fashion, or possibly art would be the driving passion. (S6, 101B).
- The French me is a girl chasing her dream in France, enjoying her life, and living in the present. The French me pursues her dream in France by working in the fashion industry. In France, she would find more designer brands that create fabulous products. She knows what style she likes as an excellent stylist to herself who dresses fashionably every day. She will have straight black hair, which fits her style, and she

might get short hair in the future. The difference is that she became more fashionable. (S3, 103A).

- French me wears linen. (S8, 201A).

4.3.2.1.4 French self is too difficult to evoke

Students in the second-year French course encountered no issues in visualizing their French selves mentally. In contrast, three first-year French learners found it challenging to conjure these mental representations. They ascribed the difficulty in imagining their French selves to their lack of prior real-life engagement in the envisioned activity or the perceived implausibility of the scenario:

- Though it was difficult for me to imagine having a seamless conversation with the adults in French, maybe because I haven't done that yet in my real life (S25, 103A).
- With other scenarios I could see myself using French in those situations, and I see that in this scenario to an extent, but it feels a little unrealistic compared to where I am in French right now (…) Classes and tests tend to invoke a feeling of uncertainty, so I believe that is what I feel here. I did not hear myself speaking French, likely partially due to the semi-alien scenario (S50, 101B).

4.3.2.2 Motivational Intensity

In the written reflections, students were asked questions designed to probe their motivation for learning French, gauging whether they found the task-guided imaginings to be plausible and if they felt excited by the future benefits their efforts to study French could bring them. Persistence and effort tied to motivational drive was explored by ascertaining how much effort students were

willing to put into the learning process and whether they appeared easily discouraged.

4.3.2.2.1 Goal Attainability

Almost all the participants (98%) expressed the belief that the envisioned scenarios were plausible and attainable in their future. This outcome validates the intentional effort made to embed the task-guided imagery exercises within authentic personal and professional situations, aiming to

Table 17 Main Study Qualitative Themes - Motivational Intensity

Motivational Intensity					
I believe…	the imagined scenarios are plausible & attainable for me	my efforts to learn French will pay off in the future	my French future will be exciting	current life stress hinders my motivation to learn French	the imagined scenarios are not plausible or attainable for me
French 101 *n* = 17	100%	40%	53%	20%	0%
French 103 *n* = 14	93%	93%	50%	14%	7%
French 201 *n* = 19	100%	68%	63%	37%	0%
Average	**98%**	**67%**	**55%**	**24%**	**2%**

provide credible storylines for the cultivation of students' L2 possible selves. To impart meaningful behavioral consequences through imagination, mental simulations need to be deemed realizable in the future (Hoyle & Sherill, 2006; Oyserman & Destin, 2010). The perceived plausibility and even probability of these scenarios unfolding in real life resonated in the written reflections of these students:

- This scenario seems reasonable to me because my career goal and life dream are to work in France. In this case, there's a real possibility that I will order food from a restaurant in France. I thank myself for all the efforts and time I spent learning French.

It also encourages me to keep working on improving my French in order to help more people in the future (S19, 101B).

- This scenario certainly seems plausible. I have imagined myself ordering food in France several times! (S11. 103A).
- Yes, this scenario does seem like something that could happen to me. (S5, 201A).
- [I] 100% can see this situation happening in fact I hope to make it a reality one day! (S14, 103A).
- After so many imagination exercises, it seems like this situation is starting to make more sense to me. I can imagine myself living like this (S36, 103B).

There was one student, however, who did not feel the scenarios were personally attainable. This student reported feeling discouraged by previous foreign language learning experiences, which had dampened their self-efficacy beliefs in this domain:

- I feel this scenario is impossible, and I know it is a pipe dream. This scenario has always been in my dream, where I am confident with my language abilities. However, after ten years of struggling with learning English, I lost hope to succeed in languages (S3, 103A).

4.3.2.2.2 Learning French will 'pay off'

Expanding upon the plausibility of the scenarios, 67% of students expressed that the task-guided imagery helped them to feel that their French learning endeavors would yield positive personal and professional benefits in the future.

- In this scenario, I felt confident and excited. It's a rewarding feeling to know that your hard work has paid off, and that it's visible to others as well. It's one thing to have conversational French skills, but having professional speaking skills would show

another level of comprehension and I believe that's something to be proud of. (S7, 201B).

- I feel very accomplished and like all my hard work paid off. (S34, 201A).
- I felt powerful, proud, and excited. I felt the way because everything probably built up for this moment in which all I did is paying off (S29, 101B).
- If I were to help the child and carry a full back and forth conversation with natives - that would be both great assurance that my time learning French was not wasted but has shown great value (S19, 101B).
- If I spend time now practicing French and looking into opportunities abroad, and other people's experiences I could one day be ordering food in a restaurant in France like this scenario (S5, 201A).
- [In the scenario] I had finally been recognized for all my hard work over the years. I've been working toward that day in real life too (S24, 201B).
- I felt very helpful and glad that I took the time to learn French (S4, 101E).
- I thank myself for all the efforts and time I spent learning French (S3, 103A).

4.3.2.2.3 Excited about 'French future'

More than half of the participants (55%) conveyed feelings of excitement and anticipation after completing the task-guided imagery, energizing their motivation to continue their learning journey.

- I feel elated at the prospect of securing the job of my dreams. There is a bit of an adrenaline high after the interview (S28, 201B).

- I feel hopeful after reading this scenario because it's an experience I would like to have. I would love to work in France and use the skills I have learned with my French classes (S17, 201B).
- I feel excited after this scenario. Because this scenario is quite positive. And it makes me feel good about myself and excited about the new job (S37, 201B).
- I could see this scenario happening for me one day in France. I plan on traveling to France and maybe one day my friends will be able to come and visit me and seeing that I can confidently speak for them makes me really excited! (S2, 201B).
- I feel powerful. The fact that I prepared so hard for the interview and did well that I could even excite about the result is just great, and improved my self-esteem. Even if I didn't get the job, I know that this experience, and the language skill will help me in the future (S23, 101B).
- I felt as if I was really in this scenario and able to connect with the situation. I feel pumped up (S16, 201B).

Positive emotions such as excitement and joy have been well-linked to motivational intensity (Gable & Driesbach, 2021; Arnold, 2005; MacIntyre & Vincze, 2017) although theorists often argue over which is cause and which is outcome (Krieglmeyer et al., 2015). We do know however, that emotion is a part of learning, as cognition and emotion are inseparable partners in the mind (LeDoux, 1998). The affective side of learning, when working in concert with the cognitive side, bolsters motivation, putting it on a firmer foundation (Arnold, 1999). When motivation is directed toward actions which nurture and shape our possible selves, a positive emotional tone becomes associated with these cognitive actions, further intensifying our motivation in an iterative process. When affirming self-appraisals are made of progress towards

reaching our possible selves, a sense of well-being arises within us, which we sustain through continued action towards becoming this self.

People are motivated by anticipating future events through foresight (Bandura, 1988). Guided by the expectation of positive outcomes or rewards from actions, these students believe that their efforts will result in success, recognition, or personal growth, thus generating excitement within them. Put another way, positive emotion can be interpreted as a type of intrinsic confirmation that one is making progress and is "on the right track." Ruvolo and Markus sum this up well, saying: "by envisioning a possible self, one may anticipate, and perhaps actually experience, some of the affect associated with the end state. And depending on whether the affect is positive or negative, the subsequent behavior may be energized or depressed (1992, pg. 97). In the examples above, the expansion of students' self schemata through vivid self visualization has been connected to an enthusiastic, affirming mood. This is because these evolving schemata are connected to expected future benefits that these students find valuable and desirable for themselves (MacIntyre & Vincze, 2017).

4.3.2.2.4 Current life stress as a hindrance

It was surprising and disheartening to observe that 24% of students reported being preoccupied with their present stress levels, indicating it was hindering their ability to fully participate in the task-guided imagery and envision a more positive future for themselves. In some cases, their stress levels impeded an optimistic outlook on their future prospects:

- You have caught me at a moment when I feel pulled in every direction, and yet stuck in place. I think French me, in a way, is my imagination of a future (real) me, I hope, in which I have found an equilibrium with myself, my goals, and the world around me.

Today, I feel lacking of the energy and brightness that my imagined self had as she moved through the day of the scenario (S8, 201A).

- The me of today carries a lot of weight and stress on my shoulders. I feel as though the French me is super carefree and go-with-the-flow living her life day by day (S34, 201A).
- Currently I am sitting in the library stressed with work, but at least it is a sunny day out, but if I was in France, like I was in the scenario, I would be walking along a side street in a rural village with a coffee in hand (S2, 201A).
- Since I am studying now, I don't have the energy to dress up [like my French self would] (S24, 201B).
- I think the French me is just more carefree, I stress a lot every day and I do not think French me would care so much about her problems and make it ruin her day (S12, 201B).
- Just like everyone else, I am very concerned or worried (I don't know which word is better) (…) I only see a failure of myself because I don't think I will make it out (S31, 103A).
- Today I feel very stressed with the fast-paced lifestyle of a university student. I want to be able to relax and have more fun at times. I feel like [the French me] would be a lot happier as well and excited to see what every day had in store (S16, 201B).
- Although it seemed that I felt good and confident in that scenario, my actual feeling does not change in a good way. I actually felt nervous. I think that it is because having a job interview is something I will have to do soon and it makes me feel stressed-out and nervous just by thinking about it already (S20, 201A).

- French me seems less anxious. Maybe because she doesn't have the pressure to hustle like she does in America (S30, 101B).
- People were walking around smiling and having a good time instead of feeling stressed, overworked, and burnout (S18, 101B).
- Currently I am taking a large load of work due to someone getting fired and it is super stressful and I feel as if my French self would request for an increase of pay and or some sort of extra compensation while doubling my workload (S18, 101B).
- Right now things can be really tough and the French me is living a more relaxed life in this scenario (S26, 101A).
- I think I am calmer and less stressed about work, etc. and able to enjoy the little things more (S33, 201A).
- I must say that I read this scenario and had to set it down and not return to it until the next day. At the moment, I feel stuck in graduate school and even envisioning a reality in which I am fabulously qualified for what I want to do seemed too much (S8, 201A).

Table 18 Main Study Qualitative Themes - Perceived Competence

Perceived Competence				
After the imagined scenarios,	I feel proud of my French ability.	I feel I could speak French well one day.	I feel more confident & relaxed with speaking French	I feel more anxious or scared speaking French
French 101 *n* = 17	78%	63%	68%	3%
French 103 *n* = 14	81%	74%	66%	7%
French 201 *n* = 19	83%	82%	67%	9%
Average	**81%**	**73%**	**67%**	**6%**

4.3.2.3 Perceived Competence

In their written reflections, students were prompted to answer questions aimed at understanding the impact of task-guided imagery on their perceptions of personal competence in L2 learning. Among these questions were inquiries about whether they perceived the proficiency levels depicted in the scenarios as realistic and attainable in their future. Here are the themes that emerged related to their L2 competence.

4.3.2.3.1 Feeling proud and more empowered

After completing the task-guided imagery scenarios, 81% of the learners reported feeling an improved sense of empowerment, pride, or capability in their ability to speak and interact in French. This was the dominant comment when it came to increases of perceived competency in French:

- The two main feelings for me in this scenario are confidence and pride. Learning to speak French is something that has taken a considerable amount of work and so picturing myself using it well in this scenario was a big achievement for me (S25, 103A).
- I felt relaxed because I know that the next time, I go to France I will already know the language well enough to feel confident about it. I just feel good that I'm finally able to express myself in French (S29, 101B).
- I feel invigorated. Helping someone, breaking the barrier of silence that often exists when walking down the street, communicating not only with a stranger but someone who speaks another language than my first. All these things give me energy and make me feel like I can do it and a part of where I am. (S8, 201A).

- I imagine feeling surprised and a bit elated to have encountered a group of French speakers and to have held my own in the conversation... As I imagined the scene, I saw myself asking "répétez, s'il vous plaît" when I didn't catch something and then being able to respond not perfect, but able to remain calm and navigate the conversation in French, as opposed to getting flustered and tongue-tied. I also imagined things I'd share about myself, like my area of study and where I was from. I felt confident in my French accent in this conversation, that I could be understood (even if recognized as not a native speaker) and understand even though I hadn't been practicing/warming up for a full conversation in French as I went to the park that morning. I think part of my feelings of elation come from the reward of exercising this skill that I'm trying to master (speaking French)….In this dream I feel confident, it feels like I am able to freely express myself without reservations (S17, 201B).

In addition to improved feelings of self-efficacy, many students stated in their reflections that they enjoyed being able to speak for, or in front of, their friends or family, showcasing their newfound competence and ability:

- I feel confident that I could talk for my friend, and it makes me realize how much I have been able to grow on my own. Having grown comfortable speaking a language my best friend does not understand is very cool. I feel proud that I can help my friend and make her time in France fun! I feel confidence in my speaking because of the way the locals react positively when I speak to them (S16, 201B) .
- I feel very proud of myself for being able to speak French for my friend. I love to be able to do things for people I care about, and I also like to impress them, so I am not shy about it (S5, 201A).

- If I feel happy or proud about this [ordering for my friend in French], it is only because I feel I can accommodate my friend (S38, 103B).
- I think I would be very proud of myself if I could order by myself in a French restaurant and I would also be more than happy to order for my friend. I also know that Lily would be very proud of my French ability because she was with me when I first started learning French. I don't think I would be shy about it but I would explain to her beforehand that I could order for her. I would also help her with the menu and give her some recommendations (S39, 103A).
- I felt good about myself after I walked away from the scene because I was able to impress myself by speaking thoroughly in French to the caregiver and to her circle. [They] were able to understand me and I was able to understand them. In this dream I felt very confident in my French, especially after speaking with the child at first as they were able to bolster my confidence (S18, 101B).

4.3.2.3.2 Future L2 proficiency is plausible

In line with heightened feelings of empowerment and pride, 73% of the participants reported being able to "see" and/or "hear" themselves speak French proficiently in the task-guided imagery, thereby making this objective seem more achievable in the future:

- It will take work and dedication to be able to get to such a point, but I think it is very possible if I put my mind to it. (S5, 201A).
- When I left the scene, I felt overjoyed that I successfully communicated with multiple people in my second language. I felt happy I helped the child and excited that I was able to speak with real members of Frances's society. I imagine my French to be short-

spoken but concise (being able to portray everything I want to say) …I felt confident and comfortable using the French I had been studying (S16, 201B).

- I was so impressed and thankful. I hope to make it a reality one day! I have been taking French for a long while now and I play on continuing it (S14, 103A).
- I feel excited to have both overcome the language barrier enough to this point that I don't consider it, and to have gotten the skills and confidence to get the dream job – showing that I am capable of truly advancing in the things I want to know and be (S22, 201B).
- I did hear myself speaking French and I believe I sounded very professional (S35, 201B).
- I felt very accomplished. I was able to help a young kid and do it in foreign language. My conversation with the child boosted my confidence, because when talking to him I had to "dumb-down" my own French. I spoke slowly and didn't use big words. This is the same manner of speaking I use currently, while learning the language. When talking to the adults, I was understood clearly and it felt good to hear their praise. I imagined I still had a slight American accent, but that did not inhibit our conversation (S40, 101E).
- I feel slightly reassured…being able to understand and hold an everyday conversation leaves a good taste in my mouth as it is attributed to how far I've come. It didn't feel like I had to commit mental resources to it, it more felt like second nature (S6, 101E).
- I feel comfortable speaking French for my friend since I have been living in this country for so long. I am also proud of myself for being able to speak in such a fluent manner (S25, 103A).

- I heard myself talking calm, profession and well. I could see the employers surprise and impressed eyes as I answered their questions. The boss sounded sure and interested. Like he really wanted me to work for him. After this interview I am feeling confident. I feel like I am at the top of the world. It has been a dream of mine for a long time to spend time and [sic] Paris and now I am so close to living there. It feels surreal and magical and like one of the best moments of my life. (S42, 101B).

In some cases, speaking proficiency was not enough, and the learners desired to live overseas, and in one case, to even become French:

- I love my life overseas. I feel proud for being able to take care of my friend in a foreign country because I would want the same for myself. I think this scenario is plausible for me because I see myself one day living in a French speaking country (S35, 201B).
- I imagine I live in France. I tell [my friend] that it took a while to get adjusted but I am having a good time (S15, 201B).
- I tell my friend everything about leaving far away from home and how she should come and live with me because I know she would love it (…) to be completely honest, this scene is exactly the type of life I want. If it comes true one day I would be so grateful to be able to speak freely in French and live in France. I would be so happy to live in my dreams and in a situation like this one (S12, 201B).
- I would want to reinvent myself and create a new life for me in France. I feel like I would be a lot happier as well and excited to see what every day had in store (S16, 201B).
- I would definitely feel different. This may sound bad but I wouldn't feel like myself, or like I would feel like I'm on vacation. It would be nice to impress them with my

French speaking skills, but I want to feel like I live in France and I am a French citizen (S17, 201B).

In contrast, six students reported feeling unsure of their ability by remarking on the discrepancy gap between their current French level and the French they "saw" themselves using in the scenario:

- It's a little hard for me to imagine the full conversation with the adults because I don't have a lot of vocabulary yet. But I think given that there was the prior dialogue with the child with less pressure, that would be a good transition. I also think after you help someone it's a bit of a confidence boost and leads to a more comfortable interaction as opposed to being in the situation where you are the one asking for help and unsure of how the person might respond (S42, 101E).
- I felt confident in my abilities in French, [but] It felt weird to have an impromptu conversation in French because my current ability is not at a level where I can speak at a normal pace. (S41, 101E).
- I had to actively advance my imagining to a place where I was confident and skilled enough in French to be able to handle such a situation (which would be a struggle now in reality). Perhaps that is what was really the difficult part — fully imagining a future scene where my own self is different, not just picturing the current me (and my current French abilities) in an imagined scene (S8, 201A).
- After this scenario I felt very happy and proud of how far I've come. One of my goals in life is to work and study abroad in France. Being able to professionally converse in French will be a major stepping stone for me and my career. After a [job] interview like this, I think I will have more confidence (S39, 103A).

- I was proud that I was able to speak fully in French without any issues to the man and to the server, it boosted my self-esteem in my ability to speak French (S18, 101B).
- But the difference is that me in that scenario was very fluent at French and had no problem speaking French. I wish that would come true some day (S45, 201A).

4.3.2.3.3 Feeling more confident in L2 ability

Not only did students feel their proficiency goals were more plausible, but they also reported feeling more confident (67%) speaking French following the task-guided imagery.

- I feel more relaxed with speaking. Like I could really do it. This makes me swell with confidence, because sometimes interactions in my native language don't even go that well! (S27, 101E).
- The French me is speaking more confident and somehow feels more connected to the world and the people in it... I feel more relaxed in this scenario than if I were living my current life (S4, 101E).
- In this scenario I feel confident, it feels like I am able to freely express myself without reservations (S17, 201B).
- Imagining the interaction in the prompt brings up feelings of comfort and a sense of self security. I like the prospect of being able to be "myself" (courteous, friendly, interactive), in other languages and in a place other than my current home or comfort zone (S25, 103A).

4.3.2.3.4 Feeling more anxious

Three students in the treatment group (average of 6%), reported feeling more anxious or nervous about imagining speaking French.

- Imagining this interaction made me feel friendly, optimistic, but a bit vulnerable (S28, 201B).
- While envisioning this exercise, I was a bit nervous at the fact that I had to order in French to a French server. I recently travelled to France this last summer, and ordering in French was the one thing I felt less than confident on (S1, 201B).
- In this scenario I feel a bit scared. This is because I'm imagining myself speak French in a professional environment. I think there is a huge difference between speaking French with peers versus to an employer. With my peer I would be less worried about my fluency, accent, grammar, etc. But with an employer, the stakes are higher (S15, 201B).

In contrast, three other students reported feeling apprehension at the beginning of the exercises, that subsequently melted away as they imagined themselves performing skillfully:

- I was scared at first, but I was excited when it was over (S24, 201B).
- At first I would be worried if I could communicate well enough to help the child, but I feel like those worries would go away because I'd be focused... I feel confident after talking with the other adults. Although, I feel like I would have been nervous during the conversation and may have stumbled over some words, but I would still be proud of myself for being able to hold a small conversation with strangers (S17, 201B).
- I felt very happy walking away from the scene because I knew I helped the child feel better and that was the most important thing. Also, feeling good that the adults understood what I was saying and had a good conversation. I felt confident talking to the adults perhaps a little nervous at first because all the attention would be on me, but overall, I would feel happy (S12, 201B).

4.4 Main Study Discussion

In this section, I will discuss the themes emerging from the qualitative student data for each of the three variables under investigation. Additionally, I will establish connections between these themes and the social-cognitive mechanisms responsible for fostering the development of L2 possible selves and improving L2 perceived competency beliefs among students in the treatment condition. Organizing the data analysis in this way provides deeper insights into the contextual circumstances of the participants by theme, and allows us to better examine the factors that contributed to the responses observed in the quantitative study.

The themes that emerged from the qualitative data provided valuable insights into how these learners characterized their L2 self development, motivational intensity, and perceived competence. These student narratives also shed light on how the task-guided imagery activities helped them create visions of their future L2 selves and bolster their beliefs about their own language abilities, shaping their drive to achieve those selves.

4.4.1.1 Themes related to the L2 Possible Self

The survey data reported significant increases in students' L2 possible self development within the treatment group suggesting that the task-guided imagery exercises led to the observable changes measured in the within-group comparisons. Below are the themes that emerged as these learners discussed their evolving L2 selves in the context of learning French.

4.4.1.1.1 French Self is more relaxed

To my knowledge, this study marks the pioneering observation of L2 possible selves characterized as more relaxed and calmer in contrast to their current self perceptions. This suggests that the emotions evoked during the task-guided imagery of their L2 possible selves were soothing and reassuring to these students. When we envision our possible selves, we undergo the emotions

linked with ourselves in those roles (Ruvolo and Markus, 1992). Positive outcomes evoke positive emotions, and conversely. In this instance students described their L2 selves as more tranquil and composed, mirroring the emotional state induced by their imaginings.

Oyserman and colleagues discovered that self-regulatory possible selves excel in guiding and sustaining positive emotions which helps combat anxiety and fear that negative possible selves can generate (2004). When we direct our attention toward an affirming self-defining objective and connect it to action, our possible selves generate and maintain positive emotion. The task-guided imagery exercises in this study facilitated this process. As students visualized themselves effectively completing actions in French, they witnessed their mastery performance aligned with their self-identified goals, resulting in feelings of fulfillment and contentment.

Schumann's research (2005) on the neurobiological effects of emotion in second language learning provides some elucidation on this. When feedback to the brain involves stimuli that encompass actions aligned with meeting individual needs or goals and is congruent with the individual's ideal self, the peripheral nervous system generates a positive appraisal of the L2 learning situation, leading to pleasant emotional experiences. Schumann argues that this positive affect diminishes fight-or-flight responses due to language performance anxiety and enhances stress coping potential, creating a more tranquil emotional learning experience.

People often interpret physiologically triggering events in stressful or challenging situations as a sign of vulnerability. This causes high arousal which can debilitate performance as individuals expect success when they are not negatively aroused. Treatments that help eliminate negative emotional arousal promote an expectation of successful performance and more positive beliefs in coping efficacy (Bandura, 1998). Self-reflection and mood evaluation play crucial roles in shaping self-schemas, as emotional states inform our beliefs about ourselves, significantly

influencing our potential and actions. Envisioning ourselves successfully engaging in activities that propel us toward goal attainment, and articulating the associated positive emotions that arise from this, strengthens favorable self-belief systems, creating a sense of well-being (Bandura, 1997; Boyatzis & Akrivou, 2006; Frazier & Hooker, 2006; Murru & Ginis, 2010).

Expanding on this idea, Gertrude Moskowitz found that positive self-reflective exercises were akin to personal growth activities and brought about a heightened sense of relaxation in L2 students, and an increased desire to participate in L2 activities (Moskowitz, 2005). Moskowitz contends that one of the most captivating subjects for exploration and discussion is in fact *oneself*. By incorporating activities that prompt learners to contemplate questions such as "Who am I?" and "How can I become that self?" (pg. 178), the exploration of one's nature and desired identity (both powerful motivators for learning) takes center stage. Moskowitz discovered that when students engage in positive self-appraisal exercises and shared their responses in an open, non-judgmental environment, they reported feeling calmer, less anxious and were more willing to participate in the L2 classroom. (Section 3.7.4.2.3. addresses the role that positive affect has on L2 motivation).

The observation that students felt more relaxed and less anxious after imagining their L2 possible selves suggests that the task-guided imagery activities may have functioned as a mitigator of negative arousal, alleviating language apprehension or anxiety through the observation of masterful performance. By providing the opportunity for mastery experiences, perceived threats are diminished, evoking positive appraisal stimuli and feelings of well-being.

4.4.1.1.2 French self is more culturally savvy, independent, and self-possessed

It is not surprising that learners viewed their French self as embodying deeper cultural understanding, more proficient in cultural navigation, and feeling overall more self-possessed.

These attributes naturally correspond with the skills and characteristics one would expect to acquire after significant exposure to the target language and culture. The L2 possible self attributes described in the student passages above are similar to ones identified by Khajavy and Ghonsooly (2017). They found that students having robust L2 possible self images experienced a more heightened perceived L2 communication and cultural competency than those who did not. This echoes earlier work by Dornyei who reported that increased feeling of self-confidence with respect to L2 language ability and L2 *milieu* (defined as "contexts related to the target language or culture", pg. 26) was one component comprising L2 possible self development (2009).

These students' visualizations of having mastered "French life abroad" have raised their feelings of confidence accordingly, allowing them to anticipate the cultural and linguistic insights they would gain in such real-life experiences. Mentally simulating actions, such as those found in the task-guided imagery, not only triggers emotional involvement, but also facilitates the acquisition of both conceptual and procedural knowledge which shape our beliefs about what we can do. Neuro-imagery research indicates that the brain processes imagined events in a similar manner to real experiences (Decety & Grèzes, 2006), implying that the self-knowledge gained from envisioning actions is integrated into our self-schemas as if those actions had been carried out in real life. When students mentally observed themselves excelling linguistically and culturally, they absorbed the acquired self-knowledge and positive emotions associated with genuine performance. This process has resulted in greater linguistic and cultural confidence, dispelling self-doubt, and reinforcing positive self-appraisals, thereby fostering a sense of increased autonomy and self-assurance.

4.4.1.1.3 French self is more fashionable and better looking

These narratives, depicting the adoption of French-inspired clothing and the confidence they hold in its role in integrating into French culture, highlight the saliency of these L2 potential selves, as outlined by the concepts of availability and perceived control (Bandura, 1998; Markus & Nurius, 1986; Norman & Aron, 2002). *Availability* is defined as the ease with which we can imagine our possible selves. The clear specificity and depth of these mental images, evidenced by their detailed descriptions of stylish French attire and hairstyles, emphasize the availability of these self representations. When individuals possess clear and vivid mental images of their possible selves, these images become psychologically closer, exerting a more substantial influence on goal-directed behavior (Oyserman & James, 2009; Wilson, 2000).

The students' confidence in their L2 selves' ability to incorporate French-inspired clothing in order to effectively embody a more French appearance illustrates their sense of *perceived control*. Said differently, they feel they can exert influence over their environment (adopting French dress styles) to achieve the desired outcome (assimilating to French culture), (Bandura, 1986). As these learners imagined themselves wearing French styles, sitting in cafés drinking coffee, and "blending in," they were linking the actions of their L2 possible self to the desired outcome of culturally assimilating, thereby amplifying the prominence of their L2 possible self (Andersen, 1983; Andersen & Godfrey, 1987; Sherman et al., 1985).

Perceived control plays a significant role in shaping beliefs about our ability to attain our possible selves. If we perceive a high degree of control over our actions and circumstances, we are more likely to believe that we can successfully pursue and achieve who we are striving to become. Furthermore, perceived control can influence the strategies we employ to work towards becoming our possible selves. For instance, if we have a strong sense of control, our strategies may involve adopting proactive behaviors, setting ambitious goals, and persisting in the face of obstacles.

Control beliefs are often observed in tandem with possible self development because the beliefs in our ability to shape outcomes inform us of what we find to be possible for ourselves (Narayanan & Ordynans, 2022). These students clearly exhibited control beliefs in the notion that their L2 selves had the ability to successfully assimilate into their imagined French cultural surroundings by adopting what they considered to be French dress styles.

4.4.1.1.4 French self is too difficult to evoke

A few students reported that their French self was "unrealistic" or "semi-alien" suggesting that viable pathways towards developing their L2 self remained clouded and unavailable to them. This is likely because the self-related information necessary to form cognitive representations (self-schema) in this domain was lacking (Reeve, 1996), rendering the schema too psychologically distant for these students. When the associative distance of the possible self is too great, its availability and *accessibility* (how prominent the L2 self is in our awareness), are reduced, lowering its activation potential (Higgins, 1996). If the possible self has low accessibility, then it is no longer being brought into the working self-concept with any frequency, which removes its motivational effect (Norman & Aron, 2002).

When low availability and accessibility coincide with perceived improbability, such as in the three cases above, it becomes challenging for the possible self to be linked to actionable plans or goals, presenting a significant barrier to motivational behavior (Oyserman and Destin, 2010). These cases are often accompanied by low self-efficacy beliefs and a lack of directional planning in the domain (Hoyle and Sherrill, 2006; Oyserman, Bybee, Terry, & Hart-Johnson, 2004). For example, the challenge I have of envisioning a rockstar version of myself can be explained by a deficiency in having a well-defined self-schema in this area, and feeling doubtful about my ability to pursue this envisioned self successfully. The more salient the L2 possible self, the more easily

it can be accessed and brought to awareness, the greater attention it will garner, and the more significant its impact on goal-oriented behavior. It is important to note that none of the second-year French students encountered this obstacle, implying that forming L2 possible selves might become more available and accessible with greater frequency and exposure to the target language.

4.4.1.2 Themes related to Motivational Intensity

Generally, the numerical data revealed only slight increases in motivational intensity for students in the treatment group. Nevertheless, in contrast to the control group, students in the treatment condition were 16% more likely to experience these increased motivational feelings. Below are the themes that surfaced as these learners characterized their motivation to learn French and the influence of the task-guided imagery on their determination to do so.

4.4.1.2.1 Goal Attainability

Most students (98%) reported that the task-guided imagery scenarios felt realistic and plausible for their L2 possible selves. This result confirms the deliberate endeavor to incorporate task-guided imagery exercises drawn from genuine personal and professional scenarios, with the aim of offering plausible narratives to spur goal achievement behavior. Given the prior discussion on the significance of plausibility in relation to motivation (please refer to section 2.2), I would like to focus here on the remaining 2% of students who expressed doubt regarding their L2 self's ability to successfully achieve the objectives presented in the task-guided imagery exercises. In this study, these students perceived L2 goals as unachievable, generating negative feelings tied to adverse language learning experiences from their past, a factor known to detrimentally affect student motivation (D'Orazzi, 2020; Dornyei, 2009).

Naturally, without conducting post-hoc interviews, it is impossible to capture a more thorough and comprehensive understanding of these students' thought processes and feelings

related to their foreign language learning journey as well as their sense of personal capabilities, outcome expectations, and perceived environmental constraints. However, the literature on growth mindset (Dweck, 2002) may shed some light on the reasons behind these perceptions and provide guidance to educators on how best to support these students.

Existing research indicates that students often mistakenly interpret any encountered difficulties in a domain as indicators of personal inadequacy, which limit the potential development of positive self-schema in that domain (Higgins, 1998; Oyserman, Bybee, & Terry, 2006; Schwarz, 2002). In such cases, students attribute the negative emotions stemming from challenging situations as personal feedback, leading to low self-efficacy beliefs and doubts about their ability to succeed. This is because students often feel that their abilities are fixed traits that cannot be improved through effort (Dweck, 2002). This is an area where we, as educators, can intervene with students to promote a more accurate perspective by normalizing the natural difficulty encountered when embarking on new endeavors.

For learners who conflate difficulty with inability, it is essential that difficulty is regularized so that students learn that ability and efficacy are not fixed traits, but are generative capabilities (Bandura, 1998; Dweck, 2002). For instance, I often emphasize to my students that everything, including learning to walk as a baby, is challenging at the beginning. Through modeling and energetic encouragement, teachers can facilitate a shift in metacognitive difficulty interpretation, transforming student thoughts from “it's too hard, so it’s not for me” to such notions as “no pain, no gain” or “you miss 100% of the shots you don't take” (Oyserman, Bybee, & Terry, 2006, pg. 190). In this study, students who encountered uncertainty or difficulty in their language learning were offered positive and supportive feedback. My goal was to assist them in reframing challenges as typical aspects of the language acquisition journey, thus motivating them to

persevere. This approach aimed to contribute to their progression towards a favorable L2 self, while distancing them from a negative L2 self perception characterized by self-doubt. The encouragement provided in this study, however, was brief, impersonal (faceless), and distant (online). Perhaps through more personalized contact and discussion, these students could have altered their negative self-perceptions towards more positive ones.

4.4.1.2.2 Learning French will 'pay off' and I am excited about my 'French future'

These comments underscore the crucial function of task-guided imagery in aiding individuals to visualize the benefits of acquiring a foreign language. By envisioning themselves succeeding and confidently handling situations in French, these students reported feeling incentivized to continue their language learning endeavor. Moreover, the exercises assisted them in linking the advantages of language learning to the scenarios in the exercise, almost as if showcased, thereby making the benefit more apparent and concrete for the learner.

According to research by Locke and Latham (1990), we are more inclined to pursue goals linked to appealing extrinsic and intrinsic rewards. Before fully committing to a goal, we typically engage in a cost-benefit analysis, evaluating the effort required to accomplish the task against our self-efficacy beliefs and the perceived benefits of the outcomes. If the perceived difficulty of attaining the goal outweighs its potential advantages, the goal is often deemed impractical and subsequently abandoned (Bandura, 1998). These students conveyed confidence that their endeavors to learn French, despite the challenges involved, would result in meaningful rewards, supported by the positive outcomes they observed in their mental visualizations (Schunk & DeBeneditto, 2020).

In addition to reporting a distinct motivation to continue their French learning journey, these learners also conveyed feelings of excitement and gratitude to themselves for having

persisted in their efforts to learn French. Remarkably, these students described these feelings retrospectively, as if looking back from a future point in time! Reading their reflections, it became evident that they seemed to have remained in their forward-projected L2 possible selves, relishing in the satisfaction of their diligent labor from a future perspective. To my knowledge, there is no other study documenting the continuity of possible self-embodiment beyond the completion of possible self imagery exercises. This noteworthy detail implies the enduring impact of possible self-mental imagery activities and their ability to have a sustained effect.

4.4.1.2.3 Current life stress as a hindrance

A considerable number of students reported that current life stressors were hindering their motivation to learn French. Reading their remarks, it became evident that factors beyond those directly tied to the L2 learning experience can significantly influence students' L2 self-development and motivation. Some students recounted that prevailing stress hindered their capacity to earnestly envision an L2 possible self and that they were too busy "hustling" to stay ahead of their current obligations. Other students juxtaposed their current "stressed-out" selves with a desired, more carefree L2 self.

Stress has profound impacts on the formation of self-schemas and motivational intensity. It disrupts the availability and accessibility of possible selves in the working self-concept, where possible selves vie for influence – an influence which is crucial for their further development (Markus & Nurius, 1986; Nurius, Casey, & Lindhorst, 2006; Oyserman & Destin, 2010; Hoyle & Sherill, 2006). Burke explains this disruptive process as an interruption of the identity feedback loop which plays a role in both maintaining the current identity and nurturing emerging ones (Burke, 1991).

Stress interferes with the ability to properly appraise the gap between the current self and the future self, resulting in a disorganized effect on goal achievement behavior. This renders reasoned courses of action less clear (Burke, 1991; Markus & Ruvolo, 1989). In certain instances, the frequency and impact of stress have been observed to diminish components of the self-concept, indicating that heightened stress correlates with reduced saliency of the self-concept (Garton & Pratt, 1995). In these instances, individuals may develop strategies to avoid negative outcomes, but these are known to not be as effective as those aimed at achieving specific, positive goals. Aloise-Young describes the stress effect on strategy development as the difference between "playing to win" versus "playing not to lose" (2001).

Performance-impairing stress stemming from cognitive or emotional demands that are unreasonably difficult or beyond the individual's coping ability lead to poor (hasty) strategies, low goal commitment, and negative affect (Reeves, 1996). Not surprisingly, studies have shown that high levels of stress, whether academic or personal, impact student ability to perform well, remain confident, and stay motivated in school (Bedewy & Gabriel, 2015). The unexpected emergence of the stress-related theme in this study may be related to the general decline in motivational intensity levels observed in the quantitative dataset (Kotter et al., 2017; Rucker, 2012; Reeve, 1996). I will address ways that language educators can help alleviate classroom stress more fully in the concluding discussion section.

4.4.1.3 Themes related to Perceived Competence

As with L2 possible self development, the within-group survey data revealed significant improvements to student L2 competency beliefs within the treatment group, suggesting that the intervention enhanced these students' conceptual and procedural knowledge of L2 contexts by allowing them to mentally undergo L2 mastery experiences. These imagined experiences enabled

them to enjoy heightened feelings of L2 competence and empowerment. The between-group results were less pronounced as both control and treatment groups experienced growth in L2 competency, a natural result of taking a language class. Despite this, the treatment group still reported broader gains in this area, with a 16% increased likelihood of achieving higher scores in competency beliefs compared to students in the control group. Below are the themes that emerged related to student feelings of increased L2 self-efficacy and competence.

4.4.1.3.1 Feeling proud and more empowered

We can develop self-efficacy in a specific domain by imagining ourselves performing tasks well in that field. As we embrace the outcomes of our simulated achievements, we experience the ensuing emotions associated with our success (Schunk & Ertmer, 2000). 81% of students in the treatment condition experienced heightened feelings of pride and empowerment linked to their perceptions of having successfully performed in French through the task-guided imagery. This type of pride, associated with attainment, is referred to as authentic or achievement-related pride, as opposed to hubris (Tangney, 1999; Tracy & Robins, 2004).

While connected to self-efficacy beliefs, achievement-related pride is distinctly different. Where self-efficacy involves acknowledging one's *capability* to complete a task (Bandura, 1988), authentic pride pertains to the emotional reaction of having achieved it (Williams & DeSteno, 2008). Xu and colleagues (2022) found that authentic pride mediated the formation of self-efficacy beliefs by influencing ability perceptions after task completions. The more pride they felt, the more capable they assumed themselves to be.

Feelings of empowerment work in much the same way. Moein and colleagues (2017) observed that medical patients who had completed a program to enhance feelings of empowerment reported concurrent and significant increases to their self-efficacy beliefs. The sense of pride and

empowerment observed among the learners in this study suggests that learners tapped into the positive feelings arising from perceptions of their imagined L2 mastery (Tracy & Robins, 2004).

Although not extensively explored in the quantitative data, several students evoked the mechanism of social acceptance in connection with their perceived L2 competency in the written reflections. Social reinforcement or *social acceptance of ability* (Williams and Lillibridge, 1992) involves receiving praise and recognition from significant others due to goal attainment or masterful performance. Social reinforcement is a potent component to competency beliefs because it has the power to mitigate self-doubt. When significant others believe we are capable, our self-efficacy is boosted (Bandura, 1998). Skinner (1995) agrees that social translation of our efforts has prominence in building (or destroying) our competency beliefs. He states that social reinforcement is so strong that significant others can influence our perception of personal control even when they are not directly critiquing the performance being scrutinized; for instance, expressed sympathy often sends the message of uncontrollability of circumstances, whereas sighs and annoyance imply more controllable causes (pg. 63).

Through performing the task-guided imagery, these L2 students were able to conceptually "show-off" their language skills in front of friends of family, and experience the subsequent social acknowledgment and admiration from their loved ones in their mind's eye. The pride they reported feeling due to having "socialized" their achievements, has amplified their sense of competence, an effect that was corroborated in the quantitative dataset.

4.4.1.3.2 Future L2 proficiency is plausible

A common theme in student passages around L2 competency is the desire for language fluency, a desire that is expressed with varying degrees of perceived competence depending on the student. Their proficiency aspirations have been fostered by the conceptual experience of having

"seen" themselves speak French in a masterful way; and some of their statements reflect a clear self-assessment, acknowledging the gap between their current and desired proficiency levels. Despite recognizing this disparity, most students reported increased confidence in their capacity to obtain their desired proficiency, as they now deemed it more feasible, having already mentally accomplished it in the task-guided scenarios.

These notions find support in research that demonstrates a positive correlation between perceived competence and the desire for L2 language aptitude (Baker & MacIntyre, 2000; Li et al., 2018; MacIntyre et al., 2013). In these investigations, students showed a willingness to take communication risks due to their strong self-efficacy beliefs. Earlier studies indicate that perceived competency often supersedes actual competency in communication contexts, especially concerning the will to communicate. (McCroskey & Richmond, 1982, 1990; Phillips, 1984, for a study in the L1). When students feel more confident in their foreign language aptitude, they are more inclined to speak out in class, or other L2 contexts, and take communication risks. In doing so, they make greater strides in proficiency.

4.4.1.3.3 Feeling more confident in L2 ability

As students wrote about their increased competency feelings to speak French, I noticed they often interchanged the words "more confident" with words like "more relaxed," "more comfortable," "freer," and "more authentic." As I read these excerpts, it became clear to me that their sense of increased "comfort" and "relaxation" was more closely tied to reduced levels of language speaking apprehension rather than a newfound ability for flawless French diction and grammar.

The calm emotional state these learners describe sharply contrasts what Horwitz and Young (1991) term *language anxiety* — the preferred expression for describing L2 communication

apprehension. The arousal of language anxiety has been observed to provoke feelings of self-consciousness and other distracting emotions, such as anger, frustration, and negative self-talk (Horwitz, 2001; Von Worde, 2003). These distressing feelings have the capacity to destabilize and weaken self-efficacy beliefs (Noels et al., 1997; Torres & Turner, 2016), affecting the quality and performance of L2 communication, and even fostering communication avoidance tactics in the classroom (Zhou, Xi & Lochtman, 2023). Anxiety can even convince capable students that their communication competence is lower than would be rated by an objective observer (MacIntyre et al., 2002).

The scripts embedded within the task-guided imagery scenarios were designed to offer reassurance to students, affirming that their abilities were not only accepted, but even admired by their imaginary conversational partners. Structured in this manner, the activities aimed to reduce the likelihood of students forming embarrassing or fretful mental images of their L2 selves, while simultaneously strengthening their self-efficacy beliefs through the positive feedback provided by these imaginary social figures. Therefore, the task-guided imagery exercises likely helped alleviate language anxiety by allowing students to experience speaking French masterfully, privately (within their own mind), and with minimal pressure - as opposed to the stress involved with speaking during foreign travel or in classroom settings.

4.4.1.3.4 Feeling more anxious

While only a few students in this study expressed anxiety regarding their L2 performance, its ramifications can be far-reaching for a learner, particularly affecting one's perceived self-efficacy, potential self-development, and motivation. This theme is connected to the concept of *language anxiety* discussed above. Gardner and MacIntyre (1993) state that it can be a relatively persistent trait, present across different L2 situations, or as a passing emotional state, emerging in

specific moments, such as the requirement to speak in front of the class (Teimouri, Goetze & Plonsky, 2019). Extensive research exists on language anxiety as it remains a significant obstacle to language acquisition and has considerable implications for the classroom environment that educators need to consider (Horwitz & Young, 1991; H. Brown, 1994; Gardner 1985; Oxford 1990a, 1990b; Reid, 1995). In the concluding discussion section, I will delve deeper into language anxiety and explore strategies that educators can implement in the classroom to provide better support for students grappling with this issue.

5 Concluding Discussion

This paper presents two studies that chronicled the development and evaluation of a pedagogical intervention designed to nurture the growth of L2 possible selves among university students studying a foreign language. To assess the effectiveness of the intervention, I conducted mixed-method research, measuring the progression of students' L2 possible selves over time while also gauging two related concepts: their L2 competency beliefs and their motivational intensity to learn the foreign language. To address my hypotheses, I analyzed two distinct sets of data (quantitative and qualitative) for both a pilot study and a main investigation. These data sets showed how the intervention influenced students' L2 possible selves, self-efficacy beliefs, and their motivation to continue with their L2 studies, while also shedding light on the characteristics of these L2 selves. The findings from the quantitative data revealed both unique insights as well as similarities with previous research, while the qualitative data exposed the intricate, multifaceted, and evolving nature of students' perceptions of their L2 selves, including experiences which took place during the Covid-19 confinement measures.

In this section, I will provide concluding remarks by bringing together the findings from both studies and interpret the results through discussion of the obstacles identified that hampered L2 possible self-development. I will particularly emphasize classroom strategies aimed at removing (or at least minimizing) these hurdles. Finally, I will present the implications of this research for educators, limitations of the studies, and suggest recommendations for future research.

5.1 Bringing the two studies together

5.1.1 Relationship of Pilot Study to Main Study

Performing the pilot study was crucial in providing valuable insights to my research procedures before conducting the main investigation. It allowed me to test the practicality of the

intervention for in-class use, verify reliability and validity of the survey instrument, and adapt the exercises towards a task-guided imagery approach to benefit more students. Due to the close researcher-subject proximity of the pilot, the need to perform a controlled study with more researcher distance from the participants became apparent to test the exportability of the intervention across different educational contexts.

5.1.2 Efficacy of the Intervention

The results from both studies support the efficacy of the pedagogical intervention in enhancing students' L2 possible selves and competency beliefs across different classroom environments, institutions, and student bodies. Conversely, the intervention yielded an uneven effect on student motivational intensity. The data showed that students who participated in the intervention reported higher motivational scores compared to their peers in the control group. Nonetheless, while the scores in the treatment group were higher than those in the control group, they still fell within a mid-range level. Additionally, students in the treatment condition reported that their motivation and effort were hampered at times by external factors such as intense academic pressure and off-campus stressors, as well as internal factors including low self-efficacy beliefs and L2 language anxiety.

5.1.3 Some Thoughts on Motivational Intensity: Why the disparity?

As stated above, the relationship between L2 possible selves and motivational intensity proved more elusive and varied in strength between the two studies in the quantitative data. This disparity could be due to several possibilities, the first one being that possible selves and motivational intensity are not strongly related. While most of the literature has focused on the association between L2 possible selves and motivational orientation, there are studies that have reported gains in self-regulatory behavior when L2 possible selves are activated, indicating an

increased ability for these students to channel effort and persistence towards goal attainment (Chan, 2011; Dörnyei & Kubanyiova, 2014; Dörnyei & Csizér, 2002; MacIntyre, MacKinnon, & Clément, 2009). Therefore, this possibility does not seem likely as increased motivational intensity and increased effort and persistence are highly interrelated.

The second possibility could be negatively attributed to the instrumentation. To explore potential issues related to this, I referred to Gocke's (2008) research, which revealed that the Gardnerian concept of L2 motivational intensity (utilized in this study) comprises two distinct subcomponents rather than only one. Gocke identified through factor analysis that out of Gardner's 10 Attitude Motivational Test Battery (AMTB) items assessing motivational intensity, 5 items measured autonomous student effort to learn the L2 beyond classroom requirements, while the other 5 items measured effort exerted based on course requirements and perceptions of what the instructor wanted. Furthermore, two of the ten items were found to be ambiguous and could be interpreted either way. Gocke found that attempting to remove the two ambiguous items significantly reduced the overall reliability of the instrument, therefore he left them in his survey. He reported that although students in his study scored high on the AMTB Motivational Intensity items, other data contradicted these results; therefore, he argued that the Gardnerian idea of motivational intensity is more complex than previously assumed and warrants further investigation.

Building on Gocke's discovery, another examination by Wang and colleagues (2022) identified six distinct factors influencing the AMTB Motivational Intensity scores. These encompass: the amount of time devoted to daily L2 learning, student L2 proficiency levels, monthly student income levels, attitudes about L2 learning from significant others, as well as the level of engagement and satisfaction experienced by students within the L2 learning environment.

In the present paper, Motivational Intensity was measured independently of any additional factors, thus it is possible that the fluctuations observed in the Motivational Intensity scores were due to variances in student interpretations of these survey items or other influences that were outside the scope of this project.

Finally, the qualitative data demonstrates that students had positive outcome expectancies connected to their efforts and persistence to study French, and in many cases, expressed that their motivational intensity was increased by pondering their exciting 'French' future. These qualitative observations contradict the survey responses, further indicating a potential instrumentation issue with this item.

5.2 Interpretation of Findings for Classroom Praxis

The insights gained from these studies have helped shape my sense of language pedagogy. On one hand, the utilization of task-guided imagery techniques for fostering possible self-development in language classes proved efficacious, bolstering student L2 self-schemata and confidence within this domain. On the other hand, these studies have deepened my understanding of influences that hinder L2 possible self development, notably, student demotivation and L2 language anxiety. Moreover, these studies have heightened my awareness of the elevated stress levels experienced by university students. In this section, I'll briefly discuss these concerning issues with the aim of offering deeper insight as well as strategies for fellow educators to help transition students away from negative towards more positive perspectives.

5.2.1 Addressing demotivation through increased classroom social interaction

A notable finding across the present studies is the complex and nuanced nature of learner motivational intensity, which is shaped by a diverse array of external and internal factors and whose absence has been correlated to negative affect. (Campbell, Dawel, & Edwards, 2021;

D'Orazzi, 2020; Dornyei, 2009; Oxford, 2005). Among the three primary domains implicated in demotivation—namely, challenges related to teachers, issues with courses, and hurdles specific to universities—student effort reduction and withdrawal have been primarily attributed to two culprits: significant life stress and the prevalence of negative emotions associated with the learning environment (D'Orazzi, 2020; Kotter et al., 2017; Reschly et al., 2008; Robotham & Julian, 2006).

Indeed, factors contributing to diminished student motivation may not be immediately evident to teachers in the classroom. Yet, data from the present studies uncovered that a substantial number of learners grapple with overwhelming academic pressures and other life stressors, leading them to fear they cannot sustain the effort required for academic success. This fear of failure amplifies stress levels and cultivates a negative emotional state, particularly in classrooms where students perceive a lack of interpersonal support (D'Orazzi, 2020). Given that negative emotions linked to the learning environment significantly contribute to student stress, the challenge for educators lies in structuring classroom dynamics so that adequate social support is fostered. This support, in the form of social interaction and peer relations, is the most prominent factor in eliciting positive affective responses from students (Garrett & Young, 2011).

Students depend on their classmates for classwork clarification and emotional support, often confessing their personal stress and doubts about performance to each other before exams or other high-stakes events. Sharing doubts and fears with trusted peers in an open, non-judgmental atmosphere increases feelings of well-being, decreases student anxiety, and increases class participation (Moskowitz, 2005). Constructive social interaction among classmates and establishing connections with peers emerge as significant catalysts for enhancing learner effort and perseverance and also help mitigate any negative experiences encountered (Bown, 2009; Dewaele, 2011; Dornyei, 2009; Garrett & Young, 2011; Kramsch, 2013; Mercer 2006; Zhang, 2007).

The benefits of social support were made salient in the pilot study case studies where student interpersonal interaction and even friendships that were forged from language study boosted student L2 self development, academic effort and competency beliefs. It is noteworthy that, unlike in the pilot study, students in the main research study, were not given the chance to exchange or discuss their responses to the intervention exercises with each other. This decision aimed to minimize additional workload for both instructors and students involved in the main research project. However, these students missed out on the benefits of peer reinforcement and social encouragement opportunities of their L2 aspirations. Although these students received positive written commentary through the online learning platform, they were aware that this feedback came from a language instructor, rather than a peer, thus diminishing its relevance in terms of *model similarity* (please refer to section 3.5.2.3.2). Moreover, since students' connection with the commenter was remote, the feedback, although positive, likely felt distant and impersonal. In contrast, students in the pilot study had opportunities to share and discuss their responses to the interventionist exercises with each other.

Given the significant role of supportive peer interactions in nurturing positive emotional experiences in educational settings, I am led to ponder whether the absence of social interaction and collaborative engagement tied to the intensely personalized nature of these exercises limited the chance for students in the main study to forge deeper social bonds crucial for fostering positive emotional experiences. Given the notable variations in motivational intensity scores across different class groups, it is plausible that students in certain classes experienced the advantages of stronger social bonding compared to other classes. Without conducting post-hoc interviews, it would be impossible to ascertain whether participants in this study faced stressors and/or negative

emotions in their L2 learning environment, and if so, to what degree these factors might have influenced their motivational levels (D'Orazzi, 2020).

That said, growth in L2 possible selves was more prominently noted among learners in the pilot study who engaged in structured classroom discussions and received peer reinforcement of their L2 aspirations, potentially facilitating the consolidation and further advancement of these developments (for peer influence, Filade et al., 2019; Pinheiro, Santos, & Pacheco, 2014), (for identity formation in social contexts, Oyserman & Destin, 2010). Given that such social interaction also contributes to generating positive emotional responses in students, I would propose supplementing the task-guided imagery exercises with in-class activities where students can share their responses in groups and offer feedback voluntarily. Through this process, students can experience increased interpersonal support by exchanging aspirations, goals, values, emotions, and more, thereby fostering a deeper self-awareness and appreciation for others, while also feeling deeply appreciated for who they are (Moskowitz, 2005).

5.2.2 Countering student stress in the classroom: What can educators do?

Stress-related mental health concerns are among the most serious and prevalent problems university students and colleges face and there has been a striking increase in the number of previously undiagnosed students requesting treatment for these issues (Chandler et al. 2021; Kay & Schwartz, 2010; Roberts, 2011). College and university mental health programs are increasing interdisciplinary research, outreach, and educational services on campuses to respond to this growing need (Harris et al., 2021).

In the context of the current study, the question arises regarding the potential influence of stress levels on students' aptitude for cultivating their L2 possible selves. Possible selves are cognitive structures which compete for attention in the working self-concept. Depressive self-

schemas, which tend to generate negative content and create preferential processing of negative information about the self, are activated by high levels of stress in college students (Beck, 1967; McClain & Abramson, 1995). Positive possible selves that would help students feel connected and involved with future goals and possibilities must compete against negative possible selves for attention in the working self-concept. When positive possible selves lose this battle, depression is more likely due to the lack of balanced influences on the self-concept (Oyserman, Bybee, & Terry, 2006).

Additionally, individuals frequently perceive physiological reactions to stressful or challenging circumstances as indicators of vulnerability. This heightened arousal can impair performance, as individuals anticipate success only in the absence of negative arousal. Pedagogical interventions aimed at reducing negative emotional arousal foster an expectation of successful performance and cultivate more positive beliefs regarding coping efficacy (Bandura, 1998). The positive affect generated from this process diminishes the stress induced fight-or-flight responses and creates a more tranquil emotional learning experience (Schumann, 2005).

In light of the preceding points, there is an urgent need for educators to recognize that strategies exist to help neutralize student stress in the classroom. Two effective ways to achieve this are: (i) normalizing the challenges inherent in the learning process, and (ii) integrating more humanistic activities into their lesson plans. Let us now delve into each of these two strategies.

Normalizing Difficulty

We know from previous studies that students often conflate initial difficulty in a subject with doubts about their capabilities and low self-efficacy beliefs (Higgins, 1998; Oyserman, Bybee, & Terry, 2006; Schwarz, 2002), (please refer to section 4.4.1.2.1). This mindset stems from a belief that abilities are fixed and cannot be improved through effort (Dweck, 2002). In these

instances, teachers play a vital role in shifting students' perceptions of difficulty, encouraging them to see challenges as opportunities for growth rather than reasons to give up (Oyserman, Bybee, & Terry, 2006, pg. 190). Some ways teachers can contribute to transforming negative outlooks is through: (i) enthusiastically praising student effort and participation (not outcome-focused praise which reinforces fixed-trait thinking, see Dweck, 2005), (ii) reassuring students by explaining that challenges are part of the learning process (Oysermen, Bybee, & Terry, 2006), and (iii) recounting personal stories of setbacks and how they were overcome. To reduce the likelihood of encountering initial difficulty, the introduction of new material should be accompanied by low-stakes group activities that afford students with peer discussion and collaboration while they cognitively 'metabolize' the new information. Peer learning organized in this way has been shown to increase student autonomy and confidence (Tullis & Goldstone, 2020).

Humanistic Activities

Moskowitz (2005) defines humanistic activities as those that engage both the intellectual *and* emotional aspects of learners. These activities integrate students' feelings, experiences, and lives with the subject matter, rendering it more personally relevant. Engaging in humanistic activities that increase self-knowledge and bring learners' strengths, goals, and values into prominence, like the interventionist exercise in these studies, has been shown to increase happiness and a sense of psychological well-being in students (Maddux, 2011; Pajares & Schunk, 2002; Park & Peterson, 2008; Seligman, 2011). In controlled studies, the integration of humanistic activities alongside peer sharing, where students effectively communicated their experiences with each other, resulted in significant improvements in learners' self-esteem, self-awareness, and overall, more positive attitudes toward the class compared to their counterparts (Chong et al., 2022; Moskowitz, 2005, 1981).

Self-reflection and mood assessment are pivotal in molding self-schemas as emotional states shape self-perceptions, profoundly impacting capabilities and behaviors. By participating in personalized activities, students are propelled toward achieving their goals while articulating the accompanying positive emotion. This reinforces positive self-beliefs and fosters a sense of well-being (Bandura, 1997; Boyatzis & Akrivou, 2006; Frazier & Hooker, 2006; Moskowitz, 2005; Murru & Ginis, 2010; Seligman et al., 2009). Put another way, these activities work by steering attention away from negative influences and towards more positive self-perceptions.

These exercises need not be long and involved. In my language classes, I have used short humanistic activities that enable students to practice L2 grammar and vocabulary while also benefiting from the inherent personal reflection and expression of these exercises. Let us now look at a couple of examples of these activities (taken from Rinvolucri, 2005):

Exercise 1: My Morning, Your Morning

In this exercise, students are asked to think of the last seven things they typically do before leaving their home. They write these down in the L2, getting help with vocabulary as needed. They are then asked to do the same for someone that they know well (a friend or family member). Students are then put into groups of three, where they read out the routines to each other and compare them. As they read their sentences aloud, they not only practice first and third person singular verb conjugations, but also relate to each other through self-expression and feedback, creating a human dimension to the task.

Exercise 2: Student Weather Forecast

In this exercise, students are asked to think of themselves as a weather system and prepare a forecast for the day, starting with their present mood as a meteorological metaphor, and ending with their forecasted mood by day's end. A student may say something like, "This morning there

was a lot of fog and drizzle. It was cold and icy with no wind. Later this afternoon, there will be a slight breeze and the sun will come out." Students prepare their individual scripts and then take turns reading them aloud in groups. This short exercise allows teachers to gauge the mood of the class while students practice their language skills with each other. In addition to the sharing and feedback benefits already mentioned, it also allows students time to self-reflect and assess how they are feeling.

Activities designed to encourage student self-reflection, centered around personal strengths and aspirations, are beneficial across various academic disciplines, not only limited to language learning. Such classroom activities foster positive experiences and perspectives into the learning process and counteract disengagement stemming from class content perceived as dull and lacking personal relevance. These reasons strongly advocate the use of humanistic activities in curricula, boosting the emphasis on positive self-concepts to mitigate student stress and foster greater feelings of competence and well-being.

5.2.3 Reducing Language Anxiety in the Classroom

Language anxiety refers to the fear or unease experienced by learners when they are required to perform in a second or foreign language (Gardner & MacIntyre, 1993) (please refer to section 4.4.1.3.3 for more explanation). This commonly arises in classroom settings where students fear their language proficiency is being judged by others, especially when asked to perform in front of the class. This phenomenon significantly affects student class participation and has been demonstrated to have adverse effects on student performance, grades, and confidence (Noels et al., 1997; Torres & Turner, 2016).

Several factors have been associated with causing language anxiety, both internal to the student and external within the learning environment (Alrabie, 2015; Rassaei, 2015; also see

section 4.4.1.3.3). In the classroom, this phenomenon has been closely linked to instructor-student interactions through ineffective teaching practices such as overly harsh error corrections, ridicule, or publicly "spotlighting" student mistakes (Effiong, 2015; Jin, de Bot, & Keijzer, 2017; Koch & Terrell, 1991). However, if teacher behavior is indeed a significant cause of this anxiety, the encouraging news is that it can also be the remedy, as educators can adopt practices that significantly reduce language anxiety in the classroom (Alrabie, 2015; Rassaei, 2015; Toyama & Yamazaki, 2021; Yinxing, Dewaele, Macintyre, 2021).

Horowitz has designed a self-reported survey to detect student language anxiety (1986); however, I have found that this phenomenon is often readily observable in class through the following behaviors, also put forth by Oxford (2005):

- Avoidance tactics: such as forgetting to do homework, arriving unprepared or late to class, low levels of speaking when called upon, lack of eye-contact with the instructor, lack of volunteering in class, hiding in the back of the class.
- Physical mannerisms: such as squirming, stuttering or stammering, shrugging shoulders when called upon, monosyllabic or noncommittal responses, being unable to reproduce the correct sound even after repeated correction.
- Other attitude signaling: open hostility, exaggerated behaviors such as always smiling, laughing, or joking when called upon, vocalizing self-deprecating remarks such as "I am just dumb."

Focusing now on solutions, I will summarize the most prominent methods below which have been shown in recent studies and through personal experience to alleviate language anxiety for students in the classroom (Alrabai, 2015; Rassaei, 2015; Rhodewalt & Tragakis, 2005; Toyama & Yamazaki, 2021; Yinxing, Dewaele, Macintyre, 2021).

Demonstrating positive teacher attitudes toward students: In this behavior, teachers demonstrate positive and empathetic behavior to their students by showing enthusiasm for the subject matter, and conveying that they are committed toward student progress. Communicating in a respectful, caring, and patient way sets a positive tone with students and translates into increased trust and empathy.

Providing ample oral practice before public performance: Teachers can reduce learner apprehension by providing students with opportunities for oral practice either with a classmate or using privately speech before having to speak aloud. Additionally, surprising students with spontaneous calls to speak in front of the class and/or write work on the board is a high-stress situation and should be avoided.

Reducing the fear of negative public evaluation: Offering feedback discreetly, away from the attention of the class, aids students in cognitively onboarding and retaining error corrections without the simultaneous burden of processing embarrassment. When needed, the instructor can choose to recast mispronounced words for the entire class to repeat, not solely focusing on the student who made the error. Finally, teachers can model positive behavior in instances where they are corrected by students for instructor mistakes in class.

Reducing test anxiety: Administering practice tests ahead of actual exams equips students with procedural knowledge concerning exam format, organization, and grading criteria. Additionally, it enables students to pinpoint areas of weakness in their understanding, allowing them to focus their study efforts more effectively. Instructors should refrain from introducing novel testing exercises that deviate from the types of exercises covered in class.

Mentoring the learning process: Language educators should normalize initial difficulty by reiterating to students that mistakes are a necessary step in language proficiency gains - just like

in young children learning to speak. By emphasizing communication ability over flawless accents or grammar, students step away from perfectionist bents that keep them tongue bound. This same idea holds true for listening and reading activities where "getting the gist" should hold prominence over an ability to understanding every word that is read or heard. I have found that using humor to recount embarrassing stories about my own L2 language blunders, and how I overcame those moments, has helped humanize the learning experience for students, helping them to have a more relaxed approach. Finally, when instructors emphasize the learning task at hand by praising student participation and initiative instead of a faultless performance, they convey that effort in learning signifies the engagement of intelligence rather than a lack thereof.

Boosting learner self-confidence: Setting achievable and realistic expectations for students and showing faith in their abilities is crucial for encouraging students who feel intimidated. Instructors should recognize and reward both accuracy and risk-tasking when evaluating student work. Finally, students learn that they are capable when their successes are contingent on their efforts and abilities. Less instructor-directive and more autonomy-oriented class environments foster an internalized sense of motivation and self-regulatory behavior. Problem-solving tasks in groups where students must 'figure out' problems, such as deciphering how to get from point A to B using a Parisian metro map, helps reduce L2 performance anxiety because students witness themselves succeeding.

5.3 Implications of these Studies for Educators

The significance of this research project lies in the pedagogical implications of providing a psychological intervention that activates and enhances student self-schemas in a positive manner by harnessing an innate human characteristic – purposefully guided imagination. There is a body of research demonstrating that increased possible self development contributes to better academic

performance, sustainability of learner effort, and increased feelings of self-efficacy in students (Dornyei & Csizér, 2002; Leondari & Gonida, 2008; Oyserman, Brickman, & Rhodes, 2007; Oyserman, Terry, & Bybee, 2006; Oyserman, Coon & Kemmelmeier, 2002; Ryan & Deci, 2009; Taguchi, Magid, & Papi 2009).

Psychological interventions, like the L2 possible self growth program presented here, are powerful tools because relatively simple, inexpensive, easy to implement interventions like this have been shown to have positive effects both in the short and long term. They do not require an overhaul of educational reform, but instead operate within context to make existing curriculum more effective. They have the potential to change students' psychology to improve academic outcomes by tapping into students' subjective experiences and activating psychologically recursive processes that are self-reinforcing. Studies have shown that well-programed interventions can generate lasting improvements in motivation and achievement "even when the original treatment message has faded in salience" (Yeager & Walton, 2011 p. 275). Used as classroom assignments, such methods deliver their psychological message covertly avoiding the stigmatization that students may feel with a blatant academic betterment intervention.

For teachers, understanding motivation as a desire to either attain or avoid possible future selves is of great practical importance because studies suggest that positive future academic selves can be activated through psychologically constructed intervention programs (Altintas, Moustafa, & Haj, 2020; Oysermen, Terry, & Bybee, 2002). By performing well-constructed task-imagery assignments, feelings of L2 self-efficacy increase as students gain conceptual knowledge relative to their linguistic self-confidence and linguistic acculturation (Dornyei, 2009; Noels et al., 1996). The greater students' sense of self-efficacy, the more effort they are willing to exert and the more successful they will become (Bandura, 1997).

When students entertain future L2 self identities that they never contemplated or considered possible, their beliefs about their potential in the language shift, encouraging them to invest more in the learning process thereby improving their academic performance. This in turn allows students to feel more confident in their abilities and become more open to new possibilities.

5.4 Limitations of the Studies

The pilot study presents several limitations alongside its contributions to its purposes. Firstly, it incorporates data from two class groups (Group 1 and Group 2) that completed both elicitation and task-guided imagery exercises, making it difficult to discern the impact of each activity type on student L2 possible self development. Another variable potentially affecting these results concerns the differing times spent and the mode in which the interventionist activities were shared with others. Participation in class online discussion sessions was voluntary, leading to unequal exposure to social reinforcement of their L2 possible self among participants. Thirdly, the absence of a control group hinders the ability to make comparative assessments, and prior participant experience with French or any other foreign language was not considered. Finally, it is essential to address the potential influences of response bias and researcher-subject proximity in the pilot study. Some students might not have felt comfortable expressing their true feelings and instead opted for socially expected responses, considering that direct feedback from the teacher would be provided. The power dynamic associated with close instructor involvement and presence might not have allowed for sufficient psychological distance, potentially impacting students' freedom of expression.

There are several limitations in the main study which I believe lie mainly in the methodological aspect. To begin with, the motivational intensity measurement could have been complemented with a measurement of motivational orientation. It is entirely conceivable for

students to feel highly motivated to pursue their L2 study, while simultaneously experiencing diminished short-term motivational intensity due to unfavorable learning conditions or extraneous events. In hindsight, having both measures would have facilitated a comparison between these two concepts, providing a clearer understanding of whether only motivational intensity, and not the broader concept of motivational orientation, was hindered. Additionally, students could have been prompted in the written reflections to reflect more on any changes in effort reduction and its causes which would have enabled more direct and less presumptive reasoning for this decline.

Another possible limitation to the main study concerns researcher-subject proximity. Whereas this proximity felt too close in the pilot study, the remote communication without direct contact or physical proximity between myself as the researcher, the language instructors, and the participants in the main study may have impeded my ability to collect more effective qualitative data and to understand the language learning environments for these participants.

The prerequisite for authorizing the research project within these language classes was that the project would minimally disrupt both students and instructors, ensuring it would not detract from the normal curriculum, consume class time, or impose additional workload on instructors. Therefore, I could not observe the students in class nor meet with them in person. In keeping with the language department's criteria for minimal impact of the project on students and instructors, it was stipulated that the totality of the possible self intervention exercises represent only 1% of each student's total grade. With such a minimal impact to their grade, many students lacked the motivation to complete enough of the activities, leading to a reduced sample size for the study.

5.5 Recommendations for Future Research

Future research should focus on investigating the impact of social interaction and peer exchange on the development of learners' L2 possible selves within language learning

environments. The results from the main study in this paper indicate that learners can experience growth in their L2 possible self development without participating in classroom discussions and peer sharing of these L2 selves. However, L2 possible self growth was notably more pronounced in the pilot study, where students did participate in these social activities. This suggests that social aspects within the learning environment may have played a prominent role in this development, which raises questions about the importance of classroom interaction and peer sharing in cultivating L2 possible selves. Thus, future investigations should examine the developmental aspect of L2 possible selves in connection with the social factors inherent in peer sharing and discussion of these L2 selves. A controlled study extending over at least one academic quarter could offer valuable insight into this social dimension.

Additionally, future research should expand upon the present qualitative analysis regarding the relationships between L2 possible self development, the use of L2 private speech, and the existence of L2 language egos. L2 literature has described the phenomenon of "feeling like a different person" when speaking a foreign language as having a *language ego*. Separately, self-directed verbalizations spoken aloud in the foreign language, not intended for communication with others, are referred to as *L2 private speech*. In this study, students reported both of these phenomena when discussing their L2 possible selves; however, there has been little research directly associating them with L2 possible self development. While this paper suggests these concepts may be interrelated, more data is needed to substantiate this relationship and understand its effects on possible self development.

Finally, it would be advantageous for future research to investigate the evolution of student self-efficacy beliefs and motivation in language learning over time, and how these changes impact student desire and effort to continue L2 learning. Lee and Krashen's research (1997) established

that second language acquisition is non-linear, with students frequently encountering dips and plateaus in their language proficiency before advancing to the next level, despite maintaining consistent levels of effort throughout the learning endeavor. Exploring the impact of this non-linear progress on students' competency beliefs is crucial, as many learners become disheartened and abandon their language learning endeavors prematurely. Shedding light on these issues could enable educators to devise strategies to guide students through these expected challenges.

The primary aim of this dissertation has been to develop and assess a pedagogical intervention that leverages an innate human characteristic—the imagination—to activate and enhance students' L2 possible selves in foreign language classes. While numerous researchers have aimed to enhance students' possible selves, what has often been lacking are the practical educational tasks and tools, translated from theory, to achieve this.

The theoretical frameworks and evidence-based data presented here advocate for the broader adoption of educational activities that engage both cognitive *and* emotional components of students. These humanistic exercises that draw on social-cognitive mechanisms not only make the curriculum personally relevant to students, but also impart knowledge and skills that extend beyond the classroom. My hope is that this work, along with future studies, will serve as a catalyst for evolving curricula to better support students in expanding their perspectives and exploring new ways of being.

Appendices

Appendix A: Pilot Study Interview Protocol

I am trying to learn about university students' experiences with studying a foreign language. In particular, I am trying to understand how learning a language affects how students feel about themselves. I'm going to ask you some questions about your foreign language learning experiences in order to better understand them. Is this alright?

The interviews are recorded and transcribed into a dialogue format so I can study them. Your name will never be used. If your interview data is published in a research journal or in my thesis, I will not use your name. Demographic data that I may collect could include: how old you are, whether you are male or female, your home county, and how many languages you already speak in addition to studying French. No names or identifying data will ever be used. It is possible I will ask you to be interviewed twice in the quarter, but I may only choose to interview you once. Each interview should last about 20-30 minutes.

General Questions:

Q1: How long have you studied French? and where? *(categorial data; introductory non-threatening and ambiguous questions to help subject feel comfortable)*

Q2: Tell me about your experiences learning French? Where were you learning French at first? And afterwards? - Can you describe your language learning experience then? Did you enjoy it? Why or why not? *(grand tour question from which funnel questions can come; also establishing an initial condition of identity with regards to French language learning)*

Q3: How did you feel about speaking/learning French initially? - Why did you think you had these feelings about speaking/learning French? How does it differ from how you feel now? *(obtaining data on where the subject is now with respect to their initial feelings with learning French; demonstrates if subject has been able to adapt self with exposure to French)*

Q4: What has been the most difficult thing about learning and speaking French? *(investigating patterns of linguistic usage that may constrain affiliation with the new language and its community)*

Q5: How have your feelings about speaking/learning French changed over time? *(investigating if affiliation with the new social community is present)*

Q6: What do you feel brought about these changes? *(investigating causal factor of changes)*

Q7: How has your experiences changed how you feel about French people, culture, or has it changed at all? *(investigating causal factor of changes)*

Q8: How do you feel learning French has changed you overall*?* Amongst your 'French' experiences, what has caused you to change the most? Why do you think you changed? *(establishing if there are perceived changes to social identity)*

French Self Questions:

Q9: Do you ever imagine yourself speaking French fluently? If so, where are you? What are you doing? *(establishing evidence of visual imagery of French self)*

Q10: Do these daydreams feel as though you are actually experiencing the scene or is it rather like a thought that passes through the mind? *(attempting to measure current imagery capacity of subject's French self)*

Q11: Do you ever imagine yourself writing emails in French, participating in a debate, or another specific activity where you are interacting in French? If so, can you describe in detail? *(establishing evidence of visual imagery of French self)*

Q12: As you describe these scenes, do you have a vivid mental picture of them? *(attempting to measure current imagery capacity of subject's French self)*

Q13: Is it easy for you to imagine scenes like these? Do images come to you easily? *(attempting to establishing subject's ability for vivid mental imagery)*

Q14: Did the French self imagination exercises help your ability to imagine yourself in French situations? Did these exercises have an affect on how you feel with respect to French? If so, how and in what ways? (*assessing impact of task-guided imagery)*

French Ought-to-Self Questions:

Q14: Is learning French important to your family or friends? Do people you respect think that learning French is important? *(establishing whether there is a connection with outside influences on self)*

Q15: Would family or friends be disappointed if you were not learning French? Can you explain? *(establishing whether there is a connection with outside influences on self)*

Q16: Does learning French help make you an educated person? Why is that? *(establishing whether there is a connection with outside influences on self)*

Q17: What would your family and friends think if you stopped learning French? What would they say to you? Have you imagined this experience? *(establishing evidence of visual imagery of French ought-to-self)*

Motivational Thinking Questions:

Q18: Why made you sign up for French class? What is your motivation?

Q19: What do you tell yourself (your internal narration) when you receive negative feedback about your language learning (bad grade, correction in class, etc.)? How does it affect your motivation? Do you ever think about quitting? What makes you overcome thoughts of quitting? *(investigating if subject minimizes negative feedback in order to maintain motivation)*

Appendix B: Pilot Study Qualitative Case Study Approach & Research Steps

According to Yin (2018), case studies are a favored qualitative research design when addressing "how" or "why" questions, especially when the emphasis is on a contemporary phenomenon within a real-life context (p. 1). Simons defines case studies as an in-depth examination from various viewpoints, exploring the intricacies and distinctiveness of a particular project, policy, institution, or system within a real-life context. It is a research-oriented approach, inclusive of diverse methods and is evidence-led (Simons, 2009).

The primary objective of the pilot study was to gain a deeper understanding of how pedagogical interventions targeting L2 possible selves, implemented within the classroom, contributed to the development of students' L2 possible selves and their motivation to learn a foreign language. Specifically, I aimed at exploring how and why the interventionist activities might enhance student L2 self-schemas. This research, delving into the "how" and "why" of this question, focuses on the real-life experiences of community college students, making it well-suited for the case study approach.

Furthermore, case studies offer the indulgence of intricate details, specific times, places, and experiences that are not unlike stories. Our identities, forged through past experiences, are essentially composed of stories — narratives that shape our understanding of who we are and how we evolved into that individual. Just as new stories guide our present selves toward future identities, the analytical lens of narrative feels particularly fitting when exploring individual identity development. Through the illustration of these students' thought processes and contextual experiences, I hope to illuminate the transitions they underwent during the L2 possible self interventions with respect to their L2 self-schemas and motivation.

It is pertinent here to mention the genuine preoccupations that researchers face when using case study approaches, such as: the difficulty of analyzing and interpreting a large quantity of data among which one must "uncover the truth;" close personal involvement, especially when the researcher is the primary data gatherer, and the validity of inferences made (Simons, 2020). It would be mismatched, however, to rationalize these concerns under conditions stemming from other research methodologies. In qualitative research, the inherent subjectivity of both researchers and participants is certain. Many of the concerns about qualitative reporting are innate to its essence and contribute to its fundamental strengths –human intelligence being essential to the interpretation of human experience. In the words of Denzin & Lincoln, "can knowing be separated from the knower?" (p. 279).

Overview of Qualitative Data Research Steps

Qualitative Research Stage	Steps taken
Pilot Development	• established semi-directed interview protocol and questions following research hypotheses and quantitative survey instrument; • documented the connection of interview questions to variables under investigation referencing the appropriate published literature; • tested the interview questions on three senior access students taking my French class to gain feedback; • refinement and final modifications of interview questions; • gained research approval with the Human Subjects Division of both PhD institution and the community college; • developed informational page about interview opportunity on the Canvas learning platform and published within my French courses
Data Collection	• in class: directed student attention to the interview opportunity and information in Canvas; went over the interview protocol; discussed the purpose of study; explained confidentiality and answered questions; went over options of either interviewing or submitting a short media project on French culture for homework grade; • published the interview sign-up sheet mid-quarter with selected dates and

	times; appointments were made and private interviewing room in campus library was reserved; • the interviews were digitally audio recorded using a Sony handheld device or Zoom software (after Covid-19 campus closure); • observation notes were taken during each interview by the researcher; • audio files were downloaded and stored on a secure server.
Data Analysis	• four longitudinal case study interviews were selected and transcribed using audio to text Microsoft software; • transcripts were proofread by the researcher while listening to the interviews for accuracy and corrections were made; research code names were assigned for confidentiality; • additional observations regarding voice tone, facial gestures, etc. were added to the transcript; • transcripts were re-read and highlighted sections were assigned thematic variables; • interview quotes were tabulated and categorized in Microsoft Excel pertaining to: (i) transitions in L2 possible selves (academic hoped-for and feared selves were included where pertinent), (ii) L2 motivation, (iii) feedback about the L2 possible self activities, and/or (iv) the research process and interviews; • individual descriptive case studies were then constructed using inductive analytic techniques; patterns and themes within the interviews were noted and quotes were selected from the transcripts to illustrate these themes; • quotes were edited to omit repetitions, circumlocutions, and slurrings. • case study descriptions were finalized, organized by thematic categories and substantiating quotes; concluding findings were drawn. • changes were made following feedback from PhD committee submittal.

Appendix C: Main Study Qualitative Data Themes & Corresponding Literature

Variable	Qualitative Data Themes	Corresponding Literature
L2 Possible Self	• is more relaxed and content	• for positive affect associated with possible self development, (Oyserman et al., 2004; Ruvolo & Markus, 1992)
	• is more culturally savvy, self-possessed, and independent	• for L2 selves and increased L2 competence, (Dornyei, 2009; Khajavy & Ghonsooly, 2017)
	• is more fashionable and better looking	• for vivid and detailed L2 possible self imagery as increased availability & accessiblity, (Dornyei, 2005, 2009; Norman & Aron, 2002; Oyserman & James, 2009; Ruvolo & Markus, 1992; Wilson, 2000)
	• or conversely, L2 self is too difficult to evoke	• for imagery capacity and L2 self development, (Dornyei, 2009; Dornyei & Chan, 2013) • for negative/positive possible self balance, (Aloise-Young, Hennigan, and Leong, 2001; Nurius, Casey, & Lindhorst, 2006; Oyserman & Markus, 1990)
Variable	**Qualitative Data Themes**	**Corresponding Literature**
Motivational Intensity	• imagined scenarios are plausible in future	• for plausibility, (Oyserman & Destin, 2010; Hoyle & Sherril, 2006)
	• feeling excitement about utilizing French in the future	• for self-regulation towards goal attainability & proximity, (Bandura, 1986; Oyserman, Bybee, & Terry, • for affect & motivation (Efklides, Schwartz, & Brown, 2018; Lee, Lee, & Bong, 2014; Miele & Scholar, 2018)
	• believing that French proficiency can be reached one day with continued effort	• for self regulation & motivation, (Efklides, Schwartz, & Brown, 2018; Lee, Lee, & Bong, 2014; Miele & Scholer, 2018; Schunk & Usher, 2019) • for performance vs learning goals, (Anderman & Wolters, 2006; Schunk & Ertmer,1999; White &
	• feeling convinced that the investment in learning French will "pay off" in the future	• for outcome expectancies, (Bandura, 1986; Lent et al., 2017; Sheu et al., 2018)
	• imagined scenarios are implausible	• for plausibility, (Oyserman & Destin, 2010; Hoyle & Sherril, 2006)
	• current life stress is a hindrance	• for negative/positive possible self balance, (Aloise-Young, Hennigan, and Leong, 2001; Nurius, Casey, & Lindhorst, 2006; Oyserman & Markus, 1990) • for stress impacts on motivation, (Bedewy & Gabriel, 2015; Miele & Scholar, 2018; Kotter et al., 2017; Rucker, 2012)
Variable	**Qualitative Data Themes**	**Corresponding Literature**
Perceived Competence	• increased sense of empowerment, pride, and happiness in imagined French proficiency	• for affective states and self efficacy, (Bandura, 1998; Joët, Usher, & Bressoux, 2011)
	• belief that proficiency in French will be attained	• for self-efficacy beliefs and personal goal setting, (Schunk & DiBenedetto, 2016; Zimmerman, Bandura, & Martinez-Pons, 1992)
	• feeling more at ease and confident when	• (for physiological/emotional indexes and self efficacy, Bandura, 1977a; Joët, Usher, & Bressoux, 2011) Schunk & Usher, 2019; Usher, 2009).,
	• or alternatively, feeling heightened anxiety or fear of speaking French	• for anxiety and perceived competence, (Bandura, 1998; Schunk & DeBeneditto,2020) .

Appendix D: Main Study Survey Items by Variable

Motivational Intensity (Gardner 2001)
10 items
I make a point of trying to understand all the French I see and hear.
I don't pay much attention to the feedback I receive in my French class.
I keep up to date with French by working on it almost every day.
I check my assignments when I get them back from my French teacher.
When I have a problem understanding something in my French class, I ask my teacher for help.
I put off doing my French homework as long as I can.
I really work hard to learn French.
I tend to give up and not pay attention when I don't understand my French teacher's explanation of something.
When I am studying French, I ignore distractions and pay attention to my task.
I can't be bothered trying to understand the more complex aspects of French.
L2 Possible Self (MacIntyre et al., 2009)
15 items
In the future I want to understand French speakers' views.
I see myself thinking like a French person one day in the future.
I want to be a knowledegable person concerning things French now and in the future.
I want to be a cultured person concerning things French now and in the future.
In the future I want to better appreciate French art, movies, and books.
In the future I want to feel at ease with French speakers
Developing friends with French people is a desire of mine.
In the future I will feel respected by others because I speak French.
I enjoy speaking French.
I see myself speaking more than one language.
I see myself being able to act like a French person one day.
Meeting and conversing with French people is in my future.
I see myself working at a job using French one day in the future.
One day I will watch French films in French.
One day I will read magazines, newspapers, and other media in French.
Perceived Control (Mosier, 2018; Schwarzer & Jerusulam, 1995; Bandura, 1997)
8 items
I expect to do well in French class
Appropriate to my course level, I have confidence in my French ability.
I always manage to solve any difficulty I have with French if I try hard enough.
Appropriate to my course level, I am confident that I could make myself understood in French if I had to.
When confronted with a grammar or vocabulary problem in French class, I can usually find a working solution.
When I have the opportunity, I like trying to say things in French even if I am not sure I'm saying it exactly right.
If I study in appropriate ways, I can learn the material I need to in French class.
I feel enthusiastic about my abilities in French.

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